The School Arts Magazine

VOL. XII SEPTEMBER, 1912 No. 1

The Editorial Point of View

BEGINNING AGAIN

"BE strong, and quit yourselves like men, O ye Philistines." Such was the war-cry of an intrepid leader whose name the old prophet did not condescend to give, a leader who won a victory so great that the very "Ark of God was taken."

The brave words of that nameless captain have winged their way to us through thirty centuries of conflict. His heartening call is worth attention now as we begin a new school year: "Be strong, and quit yourselves like men," O ye teachers.

Teachers are of two considerable sorts (There is a third sort not worth considering.): 1. Those who think they have to move to grow; 2. Those who think and grow so that they don't have to move, unless they want to. A teacher of the first sort wrote me recently, "Can't you find a new place for me? I'm tired of this. It 's the same old thing year after year." A teacher of the second sort once said to me, "I have been here several years now, and things are running pretty smoothly. I propose this year to strengthen my work in color." The first did not get a new place, and began the year without enthusiasm. The second one did not want a new place, but a new power; he began the year with enthusiasm, and he got not only his new power but a call to a larger and richer field before the year was over.

"Be strong, quit you like men." That means for us, "Exert yourself to learn something new, to attain a fresh point of view, to follow a new interest." He who does this year by year will win a prize more potent than any box of acacia wood o'erlaid with gold.

HAVE A NEW INTEREST

DECIDE at the outset what the new interest shall be. If you are a Philistine of the right sort, you will select your weakest point and set about strengthening yourself right there.

But, perhaps, you are not at liberty to choose. You have a new task assigned, a task you do not like. Then, "Be strong": let that task be your new interest. "Up, and smite"; you will warm to it, presently, and finally win.

If you are so fortunate as to have no weak point, or so unfortunate as to have no new task, let me suggest a new interest for you this year: The perfecting of your own show.

"Every teacher of drawing," says Dr. Ross, "should be primarily a show man, exhibiting works of art and explaining them to those who can see them and judge for themselves whether the explanation is satisfactory or not.

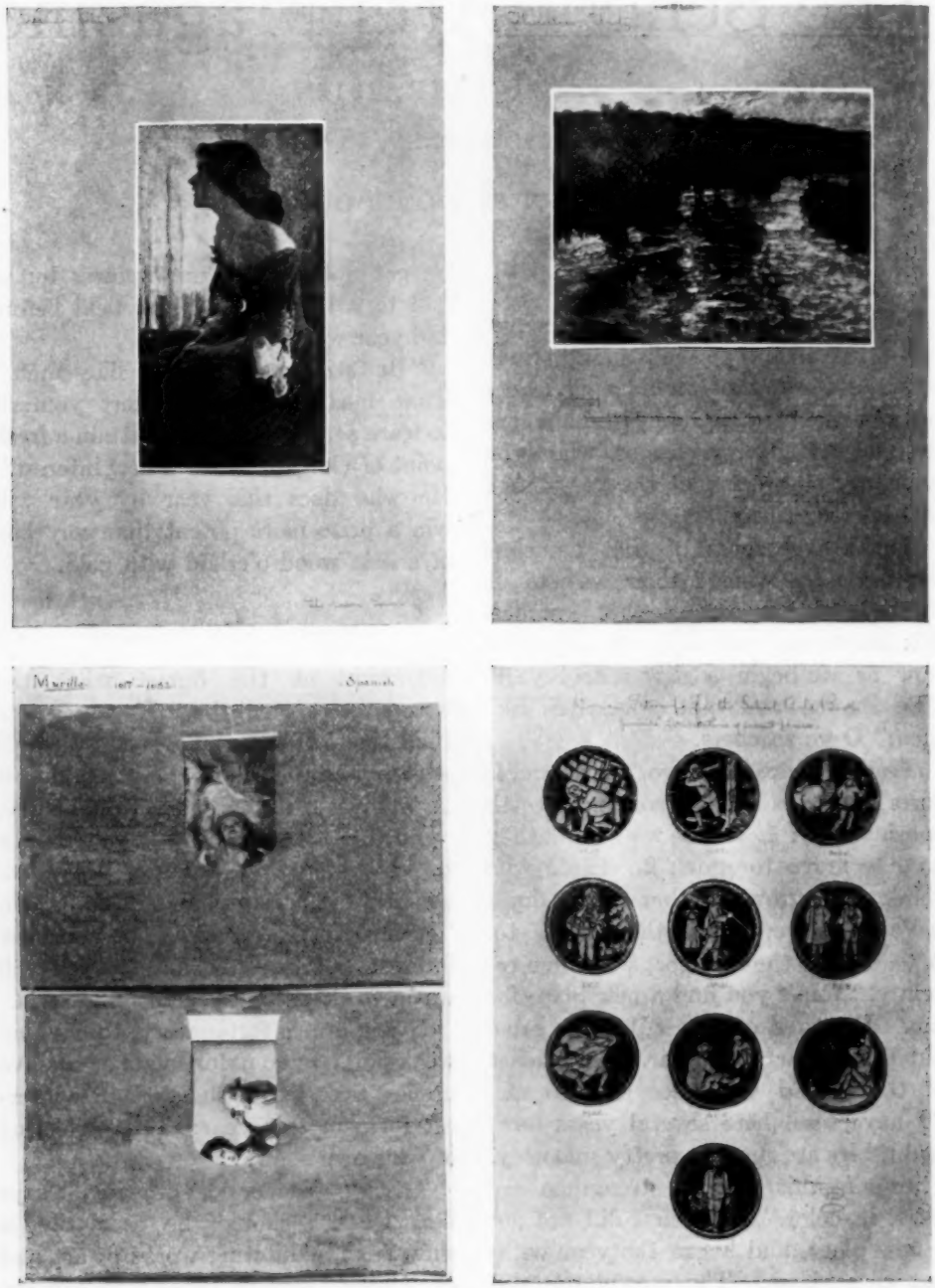


PLATE I. The professional wealth of a teacher consists in part of a rich store of reference material.

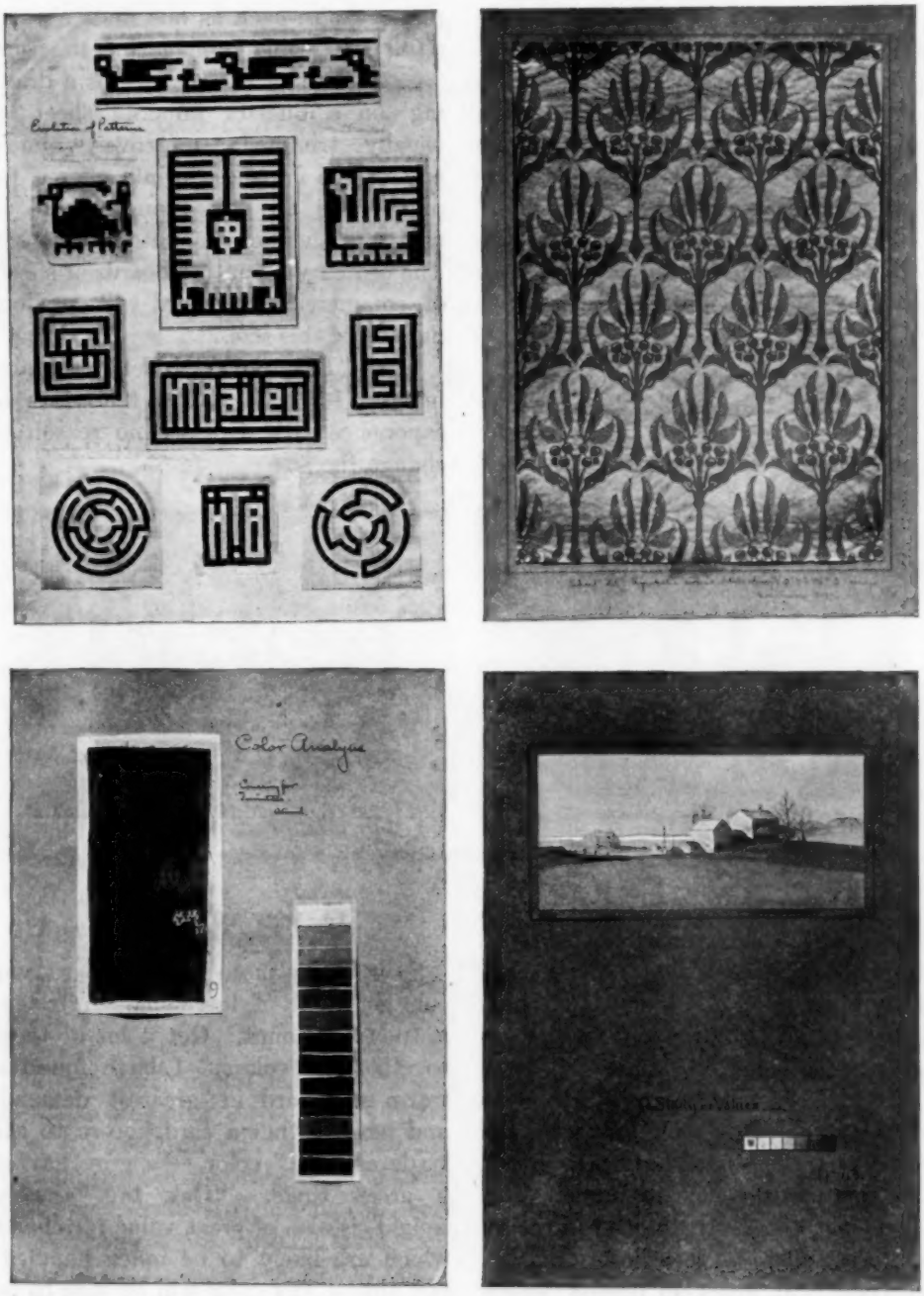


PLATE II. The mounts, while uniform in size, should vary in color, that each may present a pleasing effect.

"Principles can be defined in terms of language, but they require illustration. No definition of principles without illustration is of any use. . . . Let me urge you to spend your money on works of art or photographic illustrations. These will be of real value."

Then, let the new interest be the gathering and perfecting of your own private exhibition material.

MAKE A SHOW OF YOUR OWN

BEGIN at once with what you have. You have "kicking around somewhere" a few photographs of good things, a few drawings you have made, a few samples of good school work, a few clippings from magazines, and such like. Get all these together, and put them into useable shape.

After extensive experiment, Dr. Ross decided upon cards 10 × 14 as, on the whole, the best standard size for a collection of reference material. This size is not too large to handle easily, nor too small to be seen in an ordinary classroom. It gives an oblong which looks well vertically or horizontally. It takes agreeably the large-size cabinet photographs, such as one finds abroad, a full page from any magazine, the usual 9 × 12 sheet of the schools, or a drawing on a quarter imperial sheet as usually trimmed; moreover, almost any of the Japanese prints offered for public sale are less than 10 × 14 in area and therefore mountable upon it. The ordinary mounting boards or sheets of commercial cardboard will cut four mounts of this size.

The "Editorial Cabinet" contains mounts 10 × 14. After ten years of experience with it, I see no reason to change the size

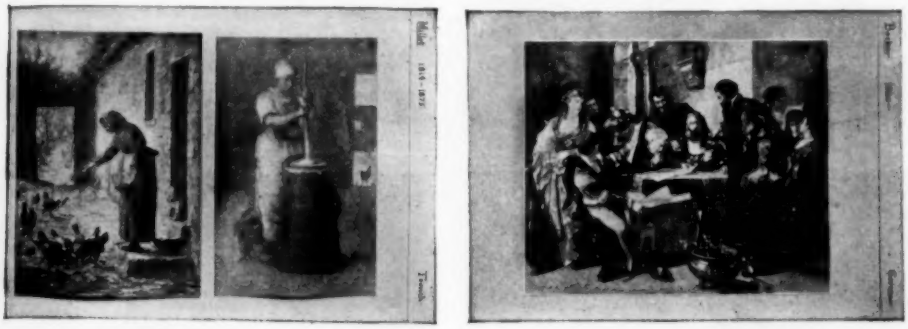


PLATE III. For purposes of comparison several small prints may be attached to the same card.

HOW TO DO IT

SAVE every piece of cardboard you can get hold of large enough to cut a 10 × 14 mount. Get a lot of these together, all colors. I have found a warm-gray card in greatest demand, and next to that a card known to the trade as "tea" color, — a gray having a green tinge. "Oak tag," heavy weight, is also of great value for charts which are likely to be much handled; but almost any color will be sure to be exactly the one you need sometime.

Take such illustrative material as

you happen to have on hand and mount it on the cards, choosing in each case an appropriate color. Add such lettering as may be necessary to identify the material and assist in its use.

Plates I, II, and III show cards from the editorial cabinet, selected as typical examples. They exhibit both vertical and horizontal arrangements, and various kinds of material on mounts of different colors.

The cards should be filed away under the subjects in the teaching of which they will be most likely to be in demand. I have found it best to arrange all the really fine things under the names of the artists who produced them, and to have one mount for the more prominent artists, containing two paper pockets (like envelopes without flaps) arranged one above the other, as shown in Plate I, into which all small prints of their works, newspaper clippings, and other relevant matter may be deposited. The two pockets distribute the material so that the pack of mounts does not become thick in the middle, the pile teeterish, and the cards warped out of shape.

PERENNIAL DIVIDENDS

GOOD results will begin to accrue at once to anybody who makes such a collection:

1. To decide what is worth saving develops judgment.

2. To select the right color of mount, to arrange the material upon it most effectively, and to letter the card properly promote good taste and skill.

3. To produce useful and beautiful things enhances the joy of life.

4. To have a wealth of helpful reference material makes teaching easy.

5. To use such material with children is to inspire them to keep their own eyes open, and to produce better work.

6. To have fine things of one's own to enjoy is delightful.

7. To have a limitless fad makes life worth living.

OUR NEW INTERESTS

THE magazine in its new form presents so many new interests to both Editor and Publisher that we count it lost time to eat and sleep! After years of tramping through a tangled forest of difficulties, guided only by the stars, we have come to the edge of the woods. We can see daylight ahead. We want to make the magazine of ever-increasing value to everybody who reads it. We wish the illustrations to present standards of excellence, the text to be solid helpfulness, and the whole, from cover to cover, to be as cheerful and inspiring as a May morning.

To this end we invite the coöperation of every reader. Send your hard questions to the man behind the Information Window. Send an account of your most successful lesson, samples of your best work, news items, and the funny sayings of your pupils to the Editor. Your contributions will bring tangible rewards, and you will have a part in promoting the good of us all.

THE WORK OF THE MONTH

SEPTEMBER is the month of beginnings. Some children begin their school life, some teachers begin their professional

life. Some pupils begin with a new teacher; all teachers begin with some new pupils. Let's all begin *easy*. After we are better acquainted with one another and with our habitat, we can turn on more power. Nature drawing, color, the simple handicraft involved in "getting out stock" for the written and drawn work, and in making things to help in making other things, these will occupy the golden days. And let them be happy days. Without joy in work we may exist, but we cannot thrive. Without joy in work, we may produce useful things, but not beautiful things.

SPECIAL FEATURES

BEAUTIFUL color is a perpetual delight. An example of such coloring combined with fine drawing appears in the fac-simile reproduction of Mr. Daniels' colored drawing of the sumach. This refined and richly colored plate was reproduced by the "four-tone process." It was printed from four half-tone plates, the first in pure yellow, the second in pure red, the third in pure blue, and the fourth in black. The drawing was made in pencil and colored by the use of the Milton Bradley water colors, which make possible a rather close approximation to the strong clear coloring of nature.

COVERS of the right sort are pleasing invitations to walk in. The cover this month is by Mr. Chase Emerson of the Fenway School of Illustration, Boston. His name and work are well known to readers of the leading magazines, such as the Saturday Evening Post, The Youth's Companion, The Sunday Illustrated Magazine, Harper's, The Woman's Home Companion, etc. Mr. Emerson's drawings are also in demand among the book publishers. His paintings command a high price from the publishers of artistic calendars, and his ideas and work are much sought after by the producers of high-class advertising in New York, Boston, and Philadelphia.

Mr. Emerson will design the covers of THE SCHOOL ARTS MAGAZINE for the coming year.

Art in Common Schoolrooms

X. The Curve Beautiful

By Fred H. Daniels

Director of Drawing, Newton, Mass.

"THE useful, in so far as opposed to the agreeable and the beautiful, is enjoyed merely in common with the lower animals; and if we love and prize what is useful to us in this sense, we do nothing more than what the ox and the ass would do. For, among all animals, man alone is gifted with a perception of order, beauty, and grace. Therefore it is, also, that the perception of the beautiful, in art as well as manners and morals, distinguishes the social, developed, and civilized man from the savage and barbarian. Beauty and grace are undoubtedly united by nature itself with the useful; but they are not, therefore, desirable because they are useful; but because from the nature of man, he enjoys a pure pleasure in their contemplation." So wrote Christoph Martin Wieland one hundred years ago.

Long ages ago, there was a time when men took no more interest in beauty than do the other animals of to-day. Scientists tell us that the human race has been experimenting with life for seventy-five thousand years. Because the human brain is gifted with the power to balance one thought with another, to reason, and to make final judgment, each race has made progress in intellectual power. The conclusions of one age became the property of the new age at its outset, and the new age proceeded to move on from the known to the unknown.

Hence it is that certain ideas are ours by right of heredity. As a simple illustration, let us take a group of words, — a village, peaceful, serene, quiet, simple. Think over the meaning of these words and see if you do not unconsciously frame other words during the process of thinking. The other words very likely will be order, beauty, fitness, because the race has learned by experience that these latter qualities are necessary to anything which is peaceful, serene, quiet, and simple. To experiment with a group of words directly opposed in meaning, think of these, — a village, anarchy, strife, combat, riot. Behind the meaning of these words are to be found disorder, opposition, noise, and complexity, and these conditions are avoided by the race at its best.

The beautiful thing is satisfactory because it is orderly, and back of the order, somewhere, there is the law which makes the order. Let us apply this thought to the drawing of curves, that we may draw with understanding. It is manifestly impossible to draw well without understanding. The problem of the beautiful curve is easily

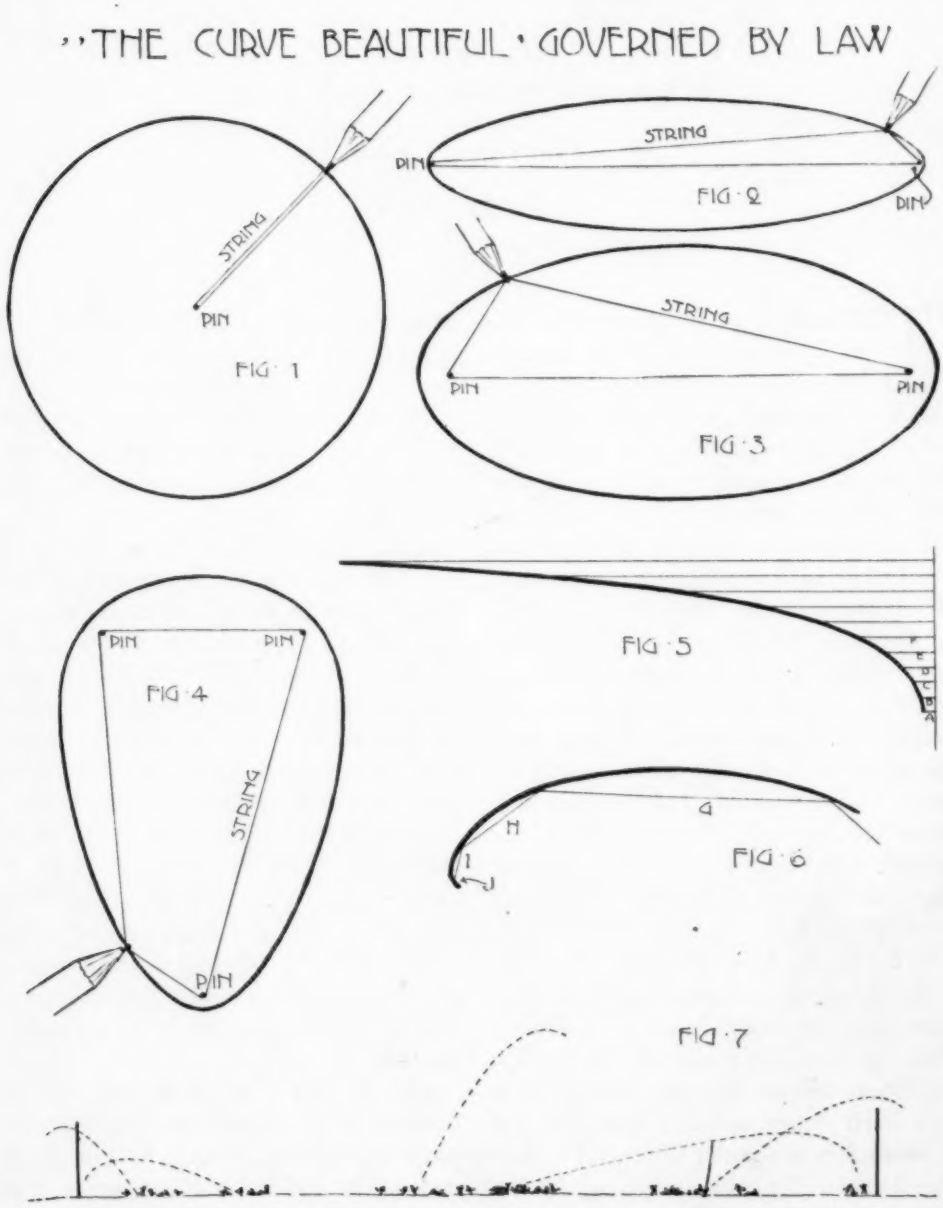


PLATE I. A pencil, a piece of string, and three pins are all that is necessary for these convincing experiments in curvature.

PLATE II. Pencil drawings from nature. Look for subtle curves as you would for the hidden face in the puzzle picture.

PLATE III. Pencil drawings from nature. Select a plant form that is more beautiful than its neighbor because it has more of these curves in it.

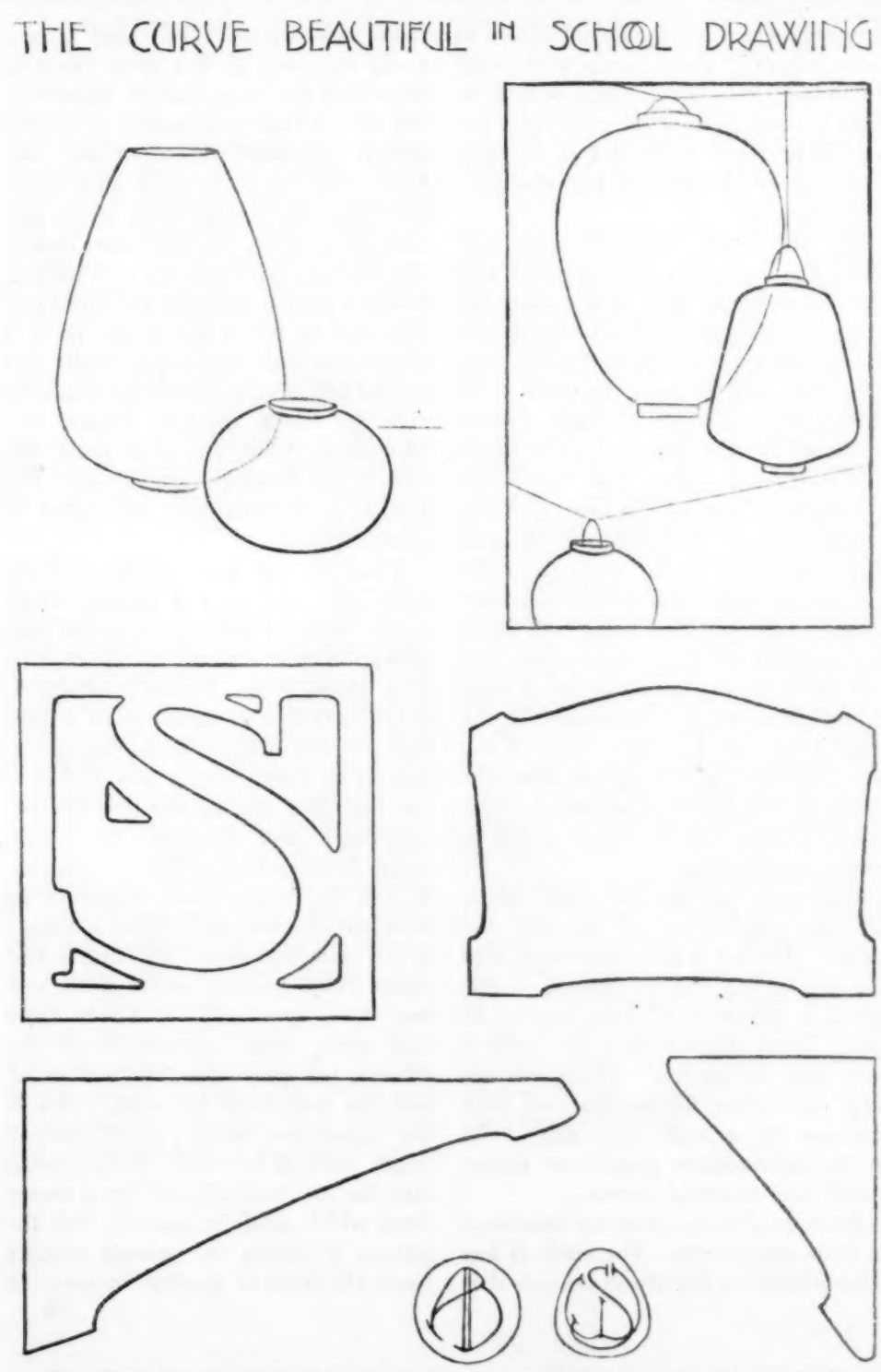


PLATE IV. In object drawing, lettering, and constructive design we must show that we know the curve beautiful.

grasped; every teacher should be able to pass judgment upon curves, with proof to uphold her decree. She should be able to draw a beautiful curve, and she should be ready to show how an ugly line may be transformed into one governed by law.

We will begin with the circle (see Plate I). A pencil, a piece of string, and three pins are all that is necessary for these experiments in school or at home. Have you these things at hand? The only real way to learn to draw is to draw! Place the pin through a sheet of paper, tie the string so as to make one continuous piece, pass the pencil through one part of the loop, and slip another part of the loop over the pin. Push the pencil as far away from the pin as the string will allow, and keep moving any way the string will allow when pulled tight. The resultant line will be a circle, governed by a very evident law, which is expressed in the usual definition of a circle. Now, if the pin pulls out, or the pencil slips, the law is broken, and that perfection which is the outcome of the reign of law is broken and destroyed.

With two pins and the same string, try the experiment of drawing the ellipse. The law is as easily seen as with the circle, but the movement of the pencil is governed by two centers, or foci. With three pins, the perfect oval may be drawn. These are the only curvilinear figures that we need consider in school, and any child in the intermediate grades can understand them as lawful curves.

All three of these curves are consistent in their movements. The circle is less interesting than the others because it is more monotonous. The oval is generally regarded as the most beautiful because it has more variety, remembering always that this variety is entirely orderly and under the rule of law. Nature seems to understand this differentiation; the human head, body, arm and leg portions, the hand and foot in the ideal are based on the oval outline, whereas hidden away in the cross section may be found the circle. So it is with fruits and vegetables, plants and animal life, also in the things made by man, as vases, capitals, domes, etc. The artist draws the oval head, the caricaturist draws the round one. The former is distinguished, the latter is commonplace.

Thus far we have discussed facts which are more or less familiar to all of us. Now we will pass on to the consideration of the beauty which may be in a single line. Figure 7, Plate I, is an illustration in miniature of a football practice field with the squads of players at work. Every now and then the ball goes soaring through the air, sometimes just skimming the earth, again shooting high above the players. It will be noticed that, whatever its direction, the line in its flight is always of the same character. This line at first seems to be straight, so far as we can see; then, gradually, it bends more and more, until, apparently, all the vitality has gone from its movement and the ball drops to earth. This is the experience which every football might write if it could. It is started into the air suddenly and by a strong force which sends it upward, but the instant it leaves the ground another force, the force of gravity, opposes the

force which generates its movement. Little by little the force of gravity overcomes the force or movement of the line itself; as the one weakens, the other seems to gain in strength, hence there is a continual change in the degree of the line's curvature from the beginning to the end. This produces a wonderful line, never repeating itself, always governed by law, and exquisitely suggesting the tempering of force through grace. A straight line indicates vigor and strength, a curve shows that another force has played upon the straight line to change and modify its force and intended flight. When we have in a line this combination of strength and force on the one hand, and of its gradual yielding to grace and delicacy on the other, we have the most beautiful curve that it is possible to draw. This is a curve which we *ought to know*. You cannot know it through a formal introduction, you must be intimately or become intimately acquainted with it. Draw it with a free, swinging arm movement; the line is a free one, it cannot be drawn with a needle-and-thread movement of the fingers. Try it repeatedly; it will not be conquered at once, it is too subtle. With every trial your understanding of the beauty of this line and your interest and appreciation will increase.

That these lines may be drawn semi-mechanically is demonstrated in Figures 5 and 6. If the reader is desirous of looking further into their drawing and explanation, it is suggested that a full and careful description may be found in "Modern Painters," Vol. IV, Chapter XVII, by John Ruskin.

This Infinite Curve, as Mr. Ruskin called it, or The Curve of Force, as Mr. Bailey aptly terms it, is to be found everywhere in nature. It is the line which nature invariably employs when strength is needed, as in all upright growths. The drawings on Plates II and III were all made from plant forms. Notice how frequently this subtle curve appears. Look for it in these drawings as you would look for the hidden face in the puzzle picture. Later, in your nature drawing, select a plant form which is more beautiful than its neighbor because it has more of these curves in it, and when you draw the plant use your best energy to reproduce these exquisite lines which nature suggests, as I have tried to do in the color plate. You will note that I say "suggests," for oftentimes nature only suggests perfection (as a matter of fact which every artist knows, this is all she generally does). It remains for us to accept nature's suggestion and render the perfect line.

In object drawing, in the signing of an initial letter or monogram, in the outline of a picture or calendar mount, the curve of a shelf bracket (see Plate IV), and all through our school drawing, if we are to produce results which give the satisfaction pointed out at the beginning of this article, we must *know* the Curve Beautiful.

The Kodak in Art Instruction

By Bessie Randall Murphy

Supervisor of Drawing, Meridian, Miss.

BIG oaks from little acorns grow, is certainly true in regard to kodak work in our school.

As the seventh grade is the highest in which we teach freehand drawing, it is generally customary for the pupils to leave some piece of work as a parting gift. They decided this year they were tired of the usual friezes and posters. After much discussion it was decided to take up the study of trees in our locality, take pictures of them, mount the prints with description, and bind the whole in book form, the designing of the cover to be the work of the class also; the book when finished to be presented to the school as a reference book.

Arrangements were made with the principals of the schools that the drawing period on Friday afternoon might be the last half-hour, thus enabling us, if the weather permitted, to get an early start with our kodaks.

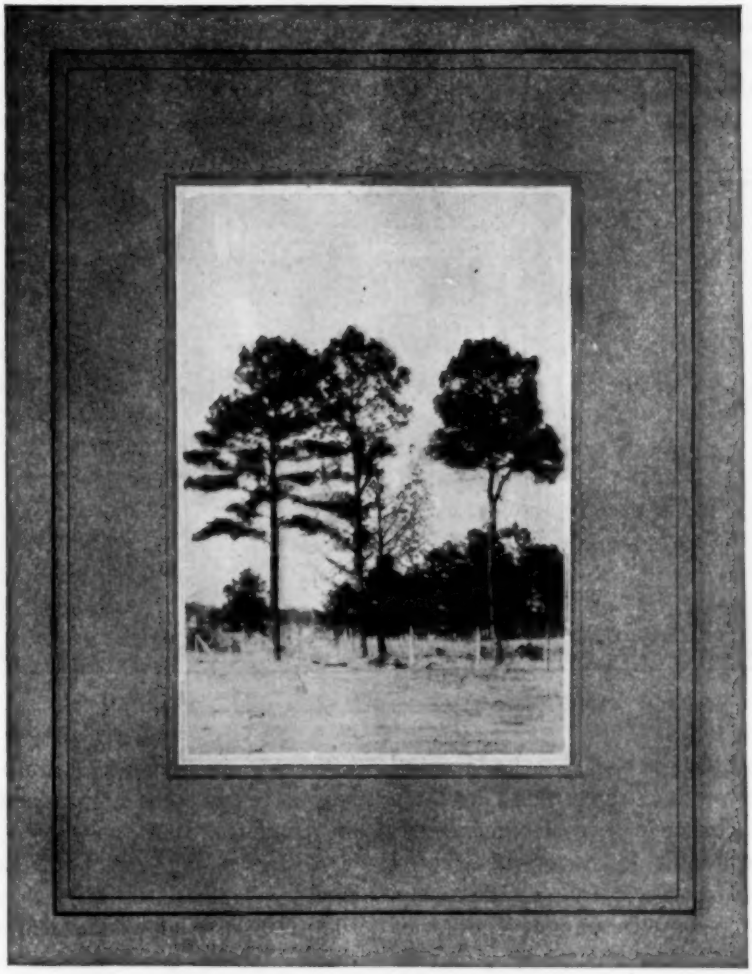
Grammar-grade pupils become enthusiastic when allowed to use the camera in nature study.

I took up this study of trees with fear, knowing that, as a rule, the subject was not considered by seventh-grade pupils as very interesting. I based my

judgment on the kind they usually drew.

I selected the pine tree as the first study, and out of forty or fifty seventh-grade pupils only four knew the three kinds of pine we have, and not one could tell the means of identifying them.

We selected a definite locality to visit, and on the way discussed the tree; for instance, the pitch pine: its height, the arrangement of its dark, stiff needles in threes, not all the same length, its various uses, etc. After such discussions I noticed that for the first pine tree sighted there was a grand rush. Fine trees were looked for, those they thought would best show the char-



No. 2 was considered a very good picture until this picture was secured from the same print by careful attention to space division.

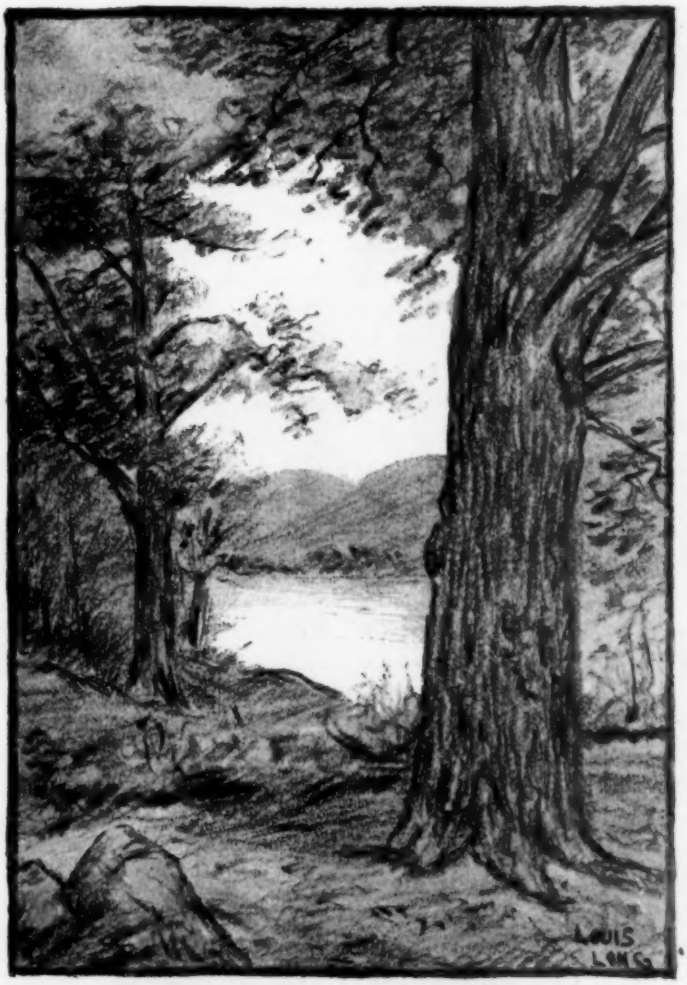
acteristics of the tree, such as its height, and its ragged branches. They wanted to take a picture of every tree in sight, but I limited them to a definite number of films an afternoon.

Did the interest continue and grow in this work? Woods were searched far and wide for fine specimens. On Monday morning I was usually greeted with the news that some boy had located a number of fine white pines, or some girl would bring in several pine needles a little different from those gathered last. Picture No. 1, a pine tree, was taken by a boy in one of the lower grades, who heard of the work, and on one of his Saturday hunting trips took the picture and handed it to me. This goes to show how interest spreads. The question arose in my mind, would this interest have been aroused if the kodak had not been used? Was it not aroused from searching for the tree, taking the picture, developing and printing it, and from having a finished reproduction, not of just a tree from most anywhere, but a tree "I located" and can still locate?

With this interest in trees, why not other work with the kodak? Landscape composition was worth trying. With the subject of composition, it was thought best to take one print at a time, so on our next tramp we discussed the subject of unequal division of space for earth and sky. Pictures were taken, and at our next lesson period we had a general criticism. Picture No. 2, for example, was considered a very good picture, except for the equal spacing of sky and ground. The same negative was used with a mat and No. 3 was printed. They could hardly wait until the print dried, they were so enthusiastic over this wonderful "discovery" of unequal spacing, something they had all known about before, but now understood.

Kodak pictures by seventh-grade pupils, Meridian, Miss.

The next picture for criticism was No. 4. After a rather long discussion, it was the general verdict that the picture was out of balance, the tree on the right was too heavy. The picture was an interesting one, though, and we decided to make a pencil sketch from it, showing good composition. No. 5 is the result.



After a long discussion print No. 4 was pronounced unbalanced, and this pencil drawing is an interpretation of it with better composition.

There was more interest in landscape composition than ever before. They seemed to realize now what composition really means. Sketching in masses, and getting the correct values can be taught by means of the kodak much more quickly and with better results than in any other way.

The boys would take their kodaks

with them on their Saturday fishing and hunting trips. No. 6 is an example of what they found. This particular print was quite a help in studying shadows and reflections.

Nos. 7 and 8 proved to be favorites. There is a charm in following the trail through the pines, or in passing through the little gate to unseen pleasures beyond.

The more I use the kodak in my work, the more possibilities I see for its use. It was an experiment this year, with scarcely any equipment. Think of what a great help the kodak would be in nature study! Think of the posters for the football and basketball games that might be made with kodak pictures of the teams and of individual players as a basis for the illustrations! What a help it would be if Mr. Bailey would have a kodak department in THE SCHOOL ARTS MAGAZINE!

The work with the kodak for the coming year will be a continuation of the study of composition in connection with picture study. We shall select Corot, study his life, his pictures, their chief characteristics, and their composition, with the hope of taking a picture that will show a similar composition. Take, for example, "A Road in Sunshine." There is a place in a road just outside our city where one just "thinks and feels" Corot. We don't have to go to the Louvre to see "The Oaks" by Rousseau. I can see it every week on the way to one of my rural schools. Can I teach my pupils to see it? Can I, by means of the kodak and copies of the great masterpieces, arouse in the pupils a love of all the beauties of nature that surround them?

If we cannot all paint like Corot or Rousseau, cannot all be taught to see something of the beauty in nature as they saw it? I believe, after all, that we can lead a child to realize that "The Heavens declare the glory of God, and the earth showeth His handiwork."

A part of the kodak class under the supervision of Miss Murphy.

The Value of Thoroughness

By Walter Sargent

Professor of Education in Relation to Fine and Industrial Art, University of Chicago

PERSISTENT drill consisting of formal repetition was once generally regarded as the most effective method by which anything could be learned, and drill was, therefore, a predominant factor in education until comparatively recent times. In the education of today, it is often looked upon with ill-favor, and is sometimes held to be a definite hindrance. Awakened interest is now supposed to arouse the appetite of the intellect for knowledge. Physiology tells us that an aroused appetite is a sign that the whole system is prepared to assimilate nourishment. Any attempt at mental acquirement by means of drill is often presumed to have somewhat the same effect upon intellectual assimilation that the old-fashioned command to eat what was before one, because it was good for him, whether he liked it or not, and to clean up the plate for the sake of thoroughness, produced upon physical digestion.

However, the question of the value of drill is too complex to be settled so easily. As the only method of procedure at all stages of work, it is surely tiresome. The pleasure of mere mastery of processes is not the highest type of enjoyment that can be cultivated. With thinking people it soon ceases to be a strong incentive to further acquirement. On the other hand, a lack of mechanical mastery of certain operations, a mastery such as can be gained only through much repetition till the processes become almost automatic, is a continual hindrance to higher forms of activity and prevents one from progressing as far as he should.

The accomplishment of most things worth doing involves two sorts of processes: the initial and somewhat mechanical ones of learning the handling of tools and materials, and the later activities when the hand and brain attend automatically to the mechanics of the affair, and thus leave the mind, which otherwise would be continually snarled up in difficulties of minor importance, free to attend to matters relating to the real purpose of the work in hand.

For example, football signals must be learned by such drill that one not only knows them but has established a tract in his brain which takes care of them almost unconsciously and leaves him free for the larger issues of the game. The combinations of movements in tennis must be made well-nigh instantaneously on the first indications of the path the ball is to take. The establishment of a possibility of such an instantaneous combination is the result of drill continued till the response is automatic. One who must stop at

the moment to attend consciously and in detail to the steps required, arrives at his conclusion just a little after the time when it would be useful in shaping the outcome of the game in his favor.

One who has not had drill in the multiplication table, finds his activity in the higher realms of mathematics hindered. The child who labors over the form of his letters does so at the expense of the flow of thought. The pupil who has reached the high school and yet, in his plant or object drawing, does not respond to the stimulus of the object with lines of the right length and slant, was saved from thorough drill at the wrong stage of his progress.

Our brains are so organized that we can turn over to them certain mechanical and elementary processes, and have them taken care of automatically while we are left free for the more important phases of our problems, but the price of this freedom is drill; drill so persistent that it establishes a groove in the brain which means a habit of mental behavior which is self regulating.

The question which the supervisor of the arts has to answer is not the general one as to whether drill is or is not a good method of teaching, but the very specific one as to what things should be taught by drill and thus ultimately cared for automatically, and what should be kept as worthy to be attended to by the full consciousness of individual attention.

In general, it may be said that the mechanical processes and the technical grammar of the means of expression are elements which may appropriately be taken out of immediate consciousness as completely as possible and be placed near to the plane of habit.

At the manual training bench, it is possible to show a boy very quickly the way of holding the plane and then to set him at work upon a project. Under these conditions, however, his attention is usually too much taken up at first by attending to the tool to get much constructive pleasure. Either he forgets his pattern in his attention to the process, or he tends to slight the workmanship in his impatience to see the finished construction. In either case the two points of view are likely to become competing instead of mutually reinforcing interests. If his attention for a time can be concentrated solely upon the use of the plane, his hand soon learns to fit the tool and to feel when its movement is right. He likes to carry it so that a single clean shaving curls from one end of the board to the other. In mastering the tool until it cuts smoothly under the hand, there is a pleasure which the hand appears to remember, and it maintains this mastery when later the consciousness needs to be busy with measures and plans.

A child can be taught the main facts regarding a pattern of a cardboard box in a short time, but the mere fact of knowing the form of one such pattern is of secondary value. Even if the child is led to a clear understanding of the matter by taking boxes to pieces and putting them together, the full value of the topic is not gained, for as yet his entire attention is absorbed by the mechanics of the process. When the process of making box patterns has become so familiar that he can go farther and begin to invent by means of them

and work out other patterns for boxes to serve various purposes, this higher form of individual expression is a sign that drill has had its proper effect. It has provided a mental adjustment for taking care of the mechanical processes at their proper level of consciousness.

It is unfortunate to stop a line of constructive work at the stage when the methods and tools have just become familiar and the mind might make the best use of them. It is usually at this time that the inventive faculty begins to work. The children who carry the work thus far have been brought into contact with the significant series of steps which lead from primitive habits of construction, by experimenting directly with the material, to the more highly developed method of experimenting with a thing by means of plans. The working drawing is interposed between their purpose and the final form of the material and to be of real service must be used as an intermediate step until familiarity with its use makes it a help rather than a hindrance. It does not become a help until a new mental habit is established of working by means of its sure forecast instead of by tentative experiments with material.

In drawing and design the same principle holds true. Tests with high school children show that pupils frequently leave the grammar schools without acquiring ability to express certain fundamental geometric shapes and relations with which they are supposed to have become familiar in the primary grades, and which, when they are well established in mind, contribute definitely to ability to represent the structure of form, right directions of lines, and grace of curves When asked to draw freehand, squares, oblongs of given dimensions, circles, ellipses of certain proportions, verticals, horizontals, parallels, perpendiculars to lines in various directions, triangles which conform to specifications, and a spiral which flows with smooth and beautiful curvature towards its pole, they are seldom able to do so. They have an acquaintance with these things, and have been taught them in a way, but the forms have not become working assets, because there has been little drill.

Even the more artistic phases of representation, such as plant and object drawing, do not yield the most valuable results without a foundation laid by drill. If a drawing is to be more than an enumeration of parts represented without organic relation, if it is to convey a convincing impression of the reality or the spirit of the thing drawn, there must be built up in the mind a definite knowledge of the type of construction involved. In plant drawing, for example, this necessitates not only free drawing of general characteristics, but a conscientious and painstaking study of the details of form and structure of at least two or three plants, so that the pupil gains an insight into the complexity and perfection of plant structure much more intimate and illuminating than any which can be obtained merely by free sketching. All this knowledge will enrich and strengthen the character of the free sketching.

In regard to constructed objects, it is a question whether one ever learns to draw them well until he has learned to draw two or three rectangular or

curvilinear solid forms from imagination, so he can place them in any position, and modify their shape by cutting away parts or building on additions. Such ability can be gained only by drill in this method of exercising the constructive imagination.

This world is so full of beautiful and useful things which are available for representation, or for types of construction, that one is sometimes tempted to hasten from one subject to another, and thus avoid interrupting the current of pleasant sensations and activities with anything like the routine of drill. Sensations and activities, however, do not contribute to permanent efficiency and enjoyment unless they are systematized and assimilated. This can be done only by taking the time necessary to master processes by drill, and to work out a more detailed knowledge of facts than the kind of spontaneous interest natural to children would lead them to attain.

In all worthy growth, periods of acquirement or absorption alternate with periods of assimilation. In the study of the arts in school, the period of acquirement should be occupied with new subject matter or new methods of presentation and the period of assimilation with fixing and elaborating the material acquired. The structure of courses in the arts will be immensely strengthened when they include statements not only of the sort of subject matter which receives consideration during different years, but also of the few fundamental facts and processes which should be mastered by study as laborious as that required for mathematics. These should be selected with discrimination and should constitute an irreducible minimum which will furnish a nucleus for indefinite addition in the way of free work but will allow little in the way of subtraction.

In constructive work the value of such thorough drill is readily evident. In freehand representation and in design it is sometimes considered as dangerous to artistic expression. Experiments, however, tend to show that the opposite is true. A form sufficiently mastered to take its place as part of one's mental furniture becomes a standard of reference for visual impressions of new and less well-understood objects of the same general type. Ability to draw one thing well gives a confidence in attempting other things that is not present when previous work has been poorly done. The results of well-directed drill may thus serve to interpret new subjects and to encourage fresh efforts.

American Masterpieces

I. The Pot of Basil. By J. W. Alexander[1]

An Appreciation

By Henry Turner Bailey

IT 'S a grewsome story — that of Isabella and her pot of Basil — even as Keats tells it in his musical and fascinating way. In the original, "a merry tale from Boccase," its scene laid in Messina, the heroine had three brothers. Keats makes their home Florence, and eliminates one of the brothers as superfluous. The poet has further expurgated and improved the story, leaving it at last somewhat as follows:

Isabel, the fair daughter of a rich merchant, was, upon his death, consigned to the care of her two brothers. A young man, Lorenzo by name, in their employ and living in their house, lost his heart to Isabel who in return loved him.

> They could not sit at meals but feel how well
> It soothèd each to be the other by.
>
> * * *
>
> Parting they seem'd to tread upon the air,
> Twin roses by the zephyr blown apart
> Only to meet again more close, and share
> The inward fragrance of each other's heart.

Their love could not long be concealed from the sharp eyes of those ledger-men, her brothers. Of course they could not approve of it, Lorenzo being but a hired servant,

> When 't was their plan to coax her by degrees
> To some high noble and his olive trees.

They therefore invited Lorenzo to ride with them one morning towards the Apennine. Having come to a lonely post in a forest, they quickly murdered him, and buried the body. Returning to Florence

> They told their sister how, with sudden speed
> Lorenzo had ta'en ship for foreign lands,
> Because of some great urgency and need
> In their affairs, requiring trusty hands.

All summer Isabel, believing the story, waited for some message from her lover. It came at last, but unhappily enough.

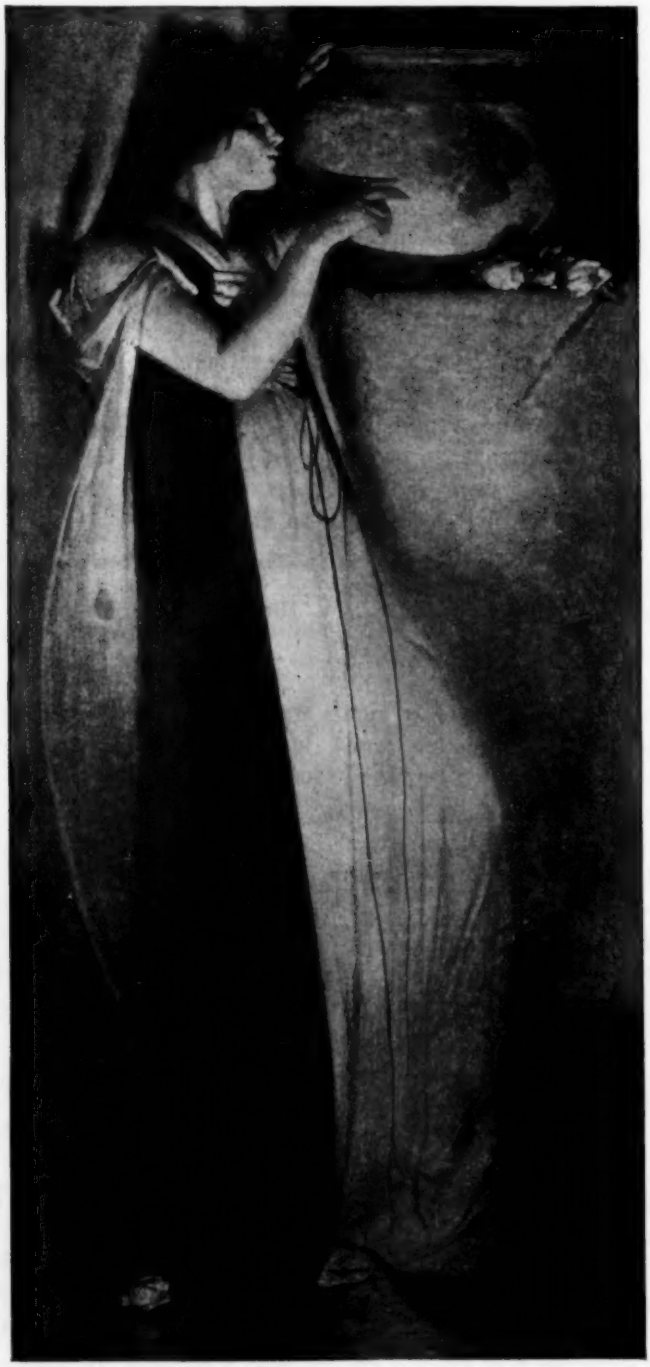
> In the mid days of autumn . . . Isabel
> By gradual decay from beauty fell.
>
> * * *
>
> And she had died in drowsy ignorance,
> But for a thing more deadly dark than all.

On a never-to-be-forgotten midnight she saw Lorenzo standing at the foot of her couch.

> The forest tomb
> Had marr'd his glossy hair. . . .
> His eyes, though wild, were still all dewy bright
> With love . . .

as he told Isabel the signs by which she might discover his grave. Next morning, accompanied only by her old nurse, she went into the forest, found the spot described by the phantom, dug there,

[1] The original may be seen in the Museum of Fine Arts, Boston, Massachusetts. The figure is nearly life size.



and came upon a body which she was able to indentify as that of her lover, for

> She turn'd up a soilèd glove, whereon
> Her silk had play'd in purple phantasies.

Severing the head from the body, she took it home.

> Then in a silken scarf, — sweet with the dews
> Of precious flowers pluck'd in Araby
>
> * * *
>
> She wrapp'd it up; and for its tomb did choose
> A garden-pot, wherein she laid it by,
> And cover'd it with mould, and o'er it set
> Sweet basil, which her tears kept ever wet,
>
> And she forgot the stars, the moon, and sun,
> And she forgot the blue above the trees,
> And she forgot the dells where waters run,
> And she forgot the chilly autumn breeze;
> She had no knowledge when the day was done,
> And the new morn she saw not: but in peace
> Hung over her sweet Basil evermore.

One day, when she left her place for an hour for chapel-shrift, her brothers, wondering at her devotion to a pot of basil, carried it away secretly and examined it. So frightened were they at the thing they found within, they left Florence, never to return. Isabel, bereaved a second time, never recovered.

> Piteous she look'd on dead and senseless things
> Asking for her lost Basil amorously;
> And with melodious chuckle in the strings
> Of her lorn voice, she oftentimes would cry
> After the Pilgrim in his wanderings,
> To ask him where her Basil was; and why
> 'T was hid from her: "For cruel 't is," said she,
> "To steal my Basil-pot away from me."
>
> And so she pin'd and so she died forlorn,
> Imploring for her Basil to the last.
> No heart was there in Florence but did mourn
> In pity of her love, so overcast.
> And a sad ditty of this story born
> From mouth to mouth through all the country pass'd:
> Still is the burthen sung — "O cruelty,
> To steal my Basil-pot away from me!"

Beautiful, passionate, bereaved Isabel, sorrowful, morbid, unbalanced, and at last crazed by grief — the heroine of a weirdly dramatic tragedy — the Isabel created by Boccacio, and immortalized by Keats, has here been rendered visible forevermore by the magic of Alexander. Probably no artist will ever do it better.

How well he has embodied the vision! The jardinière is large enough to satisfy all the conditions. The basil, a mountain mint with white flowers tinged and dotted with purple, has not yet appeared. Not the basil but that which it concealed was the precious thing. Moreover, Isabel, to be revealed as beautiful, must be seen before the basil grew, for as that flourished her beauty waned. The loose drapery, the careless hair, the pallid face with closed eyes and colorless lips, the nerveless hand aimlessly fingering the surface of the jar, reflect perfectly her state of mind. She is like that wilting spray of white roses that the artist has placed over against her, — beautiful in her isolation, but already dying, past recall.

The black stole, symbol of sorrow, is over-large, but not too large to indicate such grief as hers. The composition is erratic, but not more so than Isabel herself. The illumination of the picture is unnatural, but so is the whole situation. The footlights play upon it here, as they did in the Decameron when Eliza first presented it to entertain her companions. Strange shadows lurk about her; the scheme of color is ghostly, peculiarly appropriate to the subject, — pale greens with cold purples mingled, — the very colors of the phosphorescent light one sees perchance late in autumn playing over decaying matter in a forest glade at midnight.

But perhaps the element that adds the final charm to the picture is its composition of line. A certain indefinable spontaneous grace appears in every line Alexander draws. It is especially notable in his portraits of women, — sometimes unobtrusive as in the "Phyllis," sometimes usurping first place, as in "The Blue Bowl." The curves are never tortuous nor uncertain in their going; they always pursue their own peaceful and gracious way, lithe without lack of vigor, athletic but of exquisite refinement. As Angelico's inability to paint a real live aggressive spirit looking out of a pair of eyes undaunted actually wrought in his favor when painting madonnas and saints, as Botticelli's mannerisms were the very touches needed to perfect his Judith, so Alexander's tendency to employ long, flowing, unusual, sometimes almost erratic, lines in his compositions, led him in this particular case to produce an interpretation of Boccacio's Isabel of supreme excellence. Every line of the figure rhymes with the mood of the drifting soul. Every line helps to create that mood in the mind of the observer.

And it is all so beautiful! The genius of Keats purged to a degree this sad story of medieval passion and crime; but Alexander has made it white. In that wonderful Ode to Beauty Emerson says to her:

> Thou hast bribed the dark and lonely
> To report thy features only.

It must have been Beauty's self who inspired the artist to do that thing again, this time with his Pot of Basil.

J. W. Alexander. A Biographical Sketch

By Maud de Haven Howard

JOHN WHITE ALEXANDER, the son of John and Fanny (Smith) Alexander, was born at Allegheny City, Pennsylvania, October 7, 1856. Left an orphan when but a child, he was brought up by his maternal grandparents. When he was twelve years old, being desirous of earning his own living, he left his school and became a messenger in the telegraph office at Pittsburgh. His intelligence and energy attracted the notice of one of his chiefs, Colonel Edward J. Allen, who, on the death of the grandfather, took the boy under his own roof, where he remained until he was eighteen. At school and at work young Alexander spent his spare moments in drawing and making sketches of his companions. His skill as a portraitist began early to manifest itself and while still with Colonel Allen he did several portraits in crayon for which he received remuneration.

In 1874 he went to New York to begin his career as an artist. He applied to the Harper Company for employment, was engaged as an illustrator, and remained there three years. Then, with but a few dollars in his pocket, he sailed for Europe, with another young illustrator, Stanley Reinhart. To Paris they went first, but, finding living in that city beyond their means, they made their way to Munich, where for three months Alexander studied at the National Academy of Fine Arts. For his work here he was later awarded a medal. Even living in Munich proved to be too expensive for the young men, and they joined the colony of American artists in the little village of Polling in Northern Bavaria. While here Alexander became acquainted with Currier and Duveneck. A year later Alexander went to Venice, with Duveneck, who was director of an art school there, and from whom he received the only formal instruction of his career. Whistler was then living in Venice, and the young artist made his acquaintance and profited much by his advice.

Several years were now spent in Paris, London, and Holland. Alexander drew, painted, made sketches, illustrations, landscapes, portraits, — studying the great masters, ever conquering the difficulties of technique, and striving to approach his ideal. Some of his crayon portraits made during this period, notably those of Browning, Stevenson, Swinburne, and Alphonse Daudet, reveal his ripened ability to portray the character of his sitters.

He returned to New York, but left for Paris again in 1891. Two years later he made his first appearance at the Champ de Mars. His reception as a painter in the Salon of the Société Nationale is thus described by Gabriel Mourey:

"At once he took us captive. The Portrait Noir and the Portrait Gris exhibited by him there bore the unmistakable imprint of genuine individuality, revealed a strong and concentrated artistic vision, a novel sense of female grace, and a technique almost masterly, and in any case fresh, and above all expressive."

In 1893 Alexander was elected an associate of the Société Nationale, and in the following year was made a member, or *sociétaire*.

His habit of spending six months of the year in Paris and the other six in New York enabled him to "share in the inspiration and avoid the ruts of both," and to preserve the balance between the French and American styles. Van Dyke says that Dannat, Melchers, Alexander, and others "have nothing distinctly American about their art. It is semi-cosmopolitan with a leaning towards French methods." On the other hand, M. Mourey remarks that "Mr. Alexander has remained truly American." Von Mach says, "Alexander is modern to the core, not only in his mode of painting but also in his selections. His pictures are always interesting, frequently daring, but never lacking in taste. Without lowering the level of his art, he invariably knows how to find that point where the preferences of the masses intersect the fastidious desiderata of the connoisseur."

In 1897 Alexander again exhibited in Paris, the display including "La Robe Jaune," "La Robe Noire," and "Isabella and the Pot of Basil."

Although best known as a portrait-painter, Alexander has done notable work in other directions, especially in the realm of mural decoration. His six lunettes in the Congressional Library at Washington, a series representing "the Evolution of the Book," exhibit a dramatic force and harmony of color which give them unique distinction. In June, 1905, Alexander received a commission claimed to be "the largest and most important ever given a single artist in this country or elsewhere," namely, the task of furnishing with mural decorations the eastern wing of the new façade of the Carnegie Institute, Pittsburgh. The artist was thus recognized as a prophet in his own country. The entire work, as stipulated in the contract, was completed by the artist unassisted. These decorations are symbolic of all that a great manufacturing and commercial metropolis stands for in modern life. The Steel City itself is typified by a "mail-clad warrior, sword in hand, to whom the elements, the nations, the influences of Nature herself, bring gifts and tribute, — the arts, the graces of life, that come to crown and complete the conquest of matter."

In 1887 Mr. Alexander married Elizabeth Alexander. He now lives and works in New York.

From all quarters honors have been showered upon the artist. At the Paris Exposition in 1900, the Buffalo Exposition, and the St. Louis Exposition, he received gold medals; at the Pennsylvania Academy of Fine Arts, the Lippincott Prize and gold medal of honor; the Society of American Artists gave him the Carnegie Prize; and the Corcoran Gallery, Washington, its highest prize. Examples of his work are to be found in the Luxembourg, Paris, in several other European collections, and in the best American galleries. He is a member of the most reputable art societies in Vienna, Munich, Paris, London, and America, and an active promoter of the interests of American art.

THE SCHOOL BEAUTIFUL

The Hawley Grammar School, Northampton, Mass.

How a Public Library coöperates with a Public School in the Art Education of Children

By Alice Felton

Art Department of the Forbes Library

The Hawley Grammar School, Northampton, Mass.

LET me tell you about one of the opportunities which the Forbes Library of Northampton, Mass., recently seized. Endowed with a large purchasing gift, it has been possible for the library to gather together an unequalled collection of pictures, and to promote an ever-increasing interest

in their value as an educational asset. Years ago our first librarian, Mr. Charles A. Cutter, startled the people by loaning pictures as freely as books, and they were much more surprised when he loaned framed pictures to the teachers for schoolroom decoration.

One of the stairways in the Hawley School. A successful arrangement; pictures full of detail requiring study at short range are placed above the stairs.

Our recent librarian, Mr. W. P. Cutter, encouraged this liberality, and originated the scheme of coöperation with the educational department of the city in the use of systematic collections of framed pictures for school use. It was impossible to carry out this idea until this summer, and its fulfilment has given unbounded satisfaction.

To begin with, we had a good building in which to work out our ideas. It was new, the walls were untinted, and there was a noticeable lack of pictures; there were thirteen rooms and two wide corridors having bare wall space. Our first consideration was the color scheme. We tinted the corridor walls a light yellow to give a subtle feeling of warmth and welcome as soon as the doors opened. The rooms on the north side were tinted a creamy buff tone, and on the south a light green, two tints which are not injurious to the eyesight.

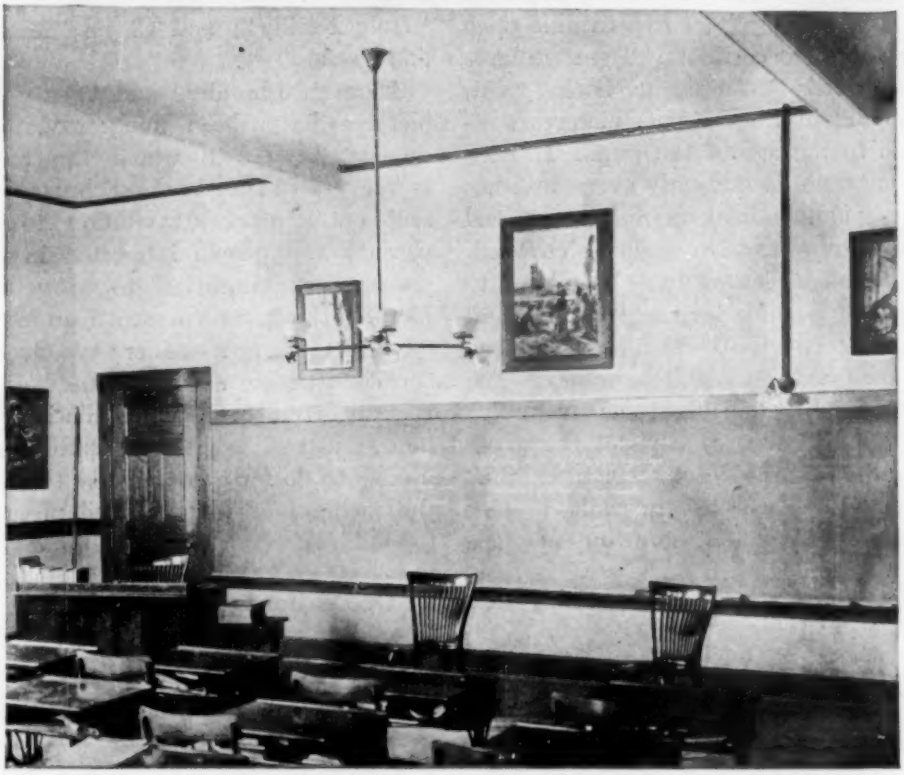
The next consideration was the collection of pictures to be hung in the halls. It divided itself into three parts: history, architecture and sculpture, and painting. There are three entrances to

the building, and at each doorway was started an art and historical story. Entering the main door you are greeted with a Greek atmosphere, — "Greek Girls Playing Ball," "Reading from Homer," "Acropolis," "Zeus," "Nike Tying on her Sandal," "The Parthenon," and several other treasures from the best of Greek civilization. Opening the rear door you are in the land of the Pharaohs, — "The Island of Philæ," "Interior of the Great Temple of Abu Simbel," "The Desert and Pyramids," "Sphinx," and "Vocal Memnon" bear witness of the mightiness of this early race. A feeling of patriotism and pride steals over you on entering the side door. There American history commences, — "Landing of Leif Ericson," "Columbus at the Court of Isabella," "Henry Hudson Entering New York Bay," "Pilgrims Going to Church." "The Portrait of Washington," "Spirit of '76," "Signing of the Declaration of Independence," "Washington Resigning his Commission" illustrate that famous period in the history of our country. "The Statue of Lincoln," "The Capitol," and "The White House" bring this historic group to a striking climax.

One stairway shows examples of Roman and Italian architecture, with Robbia's "Singing Boys" at the head shouting a welcome. The other stairway is decorated with the great examples of English and French architecture. Wandering through the upper corridor you feel akin with those fortunate people who have had an opportunity to visit the famous galleries of the old world. Well-known examples of the different schools of painting are harmoniously arranged.

A grouping of pictures in one of the corridors. A well-balanced arrangement.

The Spanish and Italian schools are represented by Velasquez, Murillo, Sarto, Botticelli, Titian, Vinci, and Raphael. The French and English schools are illustrated by Corot, Chardin, Alma-Tadema, and Turner. The Dutch and Flemish schools are shown by examples



Two typical schoolrooms, with pictures appropriate to the grade and adjusted to the wall spaces. Notice the lack of picture cords and the consequent unencumbered, peaceful effect.

of Hobbema, Hals, Rembrandt, Van Dyck, and Rubens.

To the casual visitor passing through these halls, it may appear that we have lost sight of the tender age of the grammar-grade pupils; but we argue that the atmosphere created by this permanent exhibit of some of the world's finest art treasures tends to build character and refinement, and teaches them to discriminate between the good and the bad. Passing by them many times in the course of the year, some lasting effect must be produced by the constant companionship with these masterpieces.

Thirteen rooms containing pupils of grades ranging from five to nine open out of these corridors. Here we have endeavored to infuse a home spirit, hanging in these rooms pictures suitable to the age of the pupil. In each room there is in nearly every instance a religious, animal, marine, genre, and child subject. No wall is crowded, but enough pictures have been hung to make it possible for each pupil to find at least one that will make him long to own one just like it some day. The pupils study one classroom picture a month including the life of the artist and the story in the picture, thus opening the eyes of the child to new beauties. Would it seem out of place here to say that a well-dressed room makes a well-dressed child?

Here is an illustration of what we hung on the walls of one of the fifth-grade rooms, where the children average nine years old: Adan, "End of Day"; Dessar, "Plowing"; Mesdag, "At Anchor"; Millet, "The Sower"; Murillo, "Children of the Shell"; Renouf, "Helping Hand"; Reynolds, "Angel Heads"; Dyck, "William of Nassau," and "Children of Charles the First." For the ninth grade we selected Sargent's "Frieze of the Prophets"; Mauve, "Autumn Day"; Troyon, "Oxen Plowing"; Bastien Lepage, "Jeanne D'Arc"; Millet, "Shepherdess"; Knaus, "Holy Family"; and Clay's "Marine and Vessels."

About two hundred and twenty-five pictures have been hung: none are duplicated. As a whole the effect is very satisfactory. In February we sent out a general invitation to all parents and people interested in the progress of education to view this picture exhibit, a permanent loan to the city from the Forbes Library. Over a thousand people availed themselves of this opportunity. The installation, we hope, illustrates what it is possible for a library to do for a community through the medium of well-classified pictures for children.

The Hawley School Decorations

AMERICAN HISTORY GROUP
(Lower Hall)

MORAN, EDWARD, 1829–1901.
Landing of Leif Ericson (Smithsonian Institute, Washington, D. C.).
Santá Maria, Nina, and Pinta (Smithsonian Institute, Washington, D. C.).

PIOMBO, SEBASTIANO DEL, 1485–1547.
Portrait of Columbus (Metropolitan Museum).

BROZIK, VACELAR, 1852–1901.
Columbus at the Court of Isabella (Metropolitan Museum).

BRUSH, GEORGE DE FOREST, 1855–
Silence Broken (Museum of Fine Arts, Boston).

MORAN, EDWARD, 1829–1901.
Sir Henry Hudson Entering New York Bay (Smithsonian Institute, Washington, D. C.).

STUART, GILBERT CHARLES, 1755–1828.
George Washington (Museum of Fine Arts, Boston).

HUNT, WILLIAM MORRIS, 1824–1879.
The Bugle Call.

MORAN, EDWARD, 1829–1901.
First Recognition of the American Flag by a Foreign Nation (Smithsonian Institute, Washington, D. C.).

WILLARD, ARCHIBALD M., 1839–
Spirit of '76 (Town Hall, Marblehead, Mass.).

KLINE, WILLIAM FAIR, 1870–
Her Tribute.

LENTZE, EMANUEL, 1816–1868.
Washington Crossing the Delaware (Metropolitan Museum).

TRUMBULL, JOHN, 1756–1843.
Signing the Declaration of Independence (Athenæum, Hartford, Conn.).
Washington Resigning his Commission (Capitol, Washington, D. C.).

MORAN, EDWARD, 1829–1901.
Embarkation of the Pilgrims (Smithsonian Institute, Washington, D. C.).

BOUGHTON, GEORGE HENRY, 1843–
Pilgrims Going to Church.

JAMES, DAVID.
The Wave.
Yellowstone Park, Lower Falls.

JOHNSON, EASTMAN, 1824–1906.
Boy Lincoln (Berea College, Berea, Ky.).

ST. GAUDENS, AUGUSTUS, 1848–1907.
Abraham Lincoln (Lincoln Park, Chicago).

Washington, D. C.
Capitol.
White House.

FRENCH, DANIEL CHESTER, 1850–
Alma Mater (Columbia College, New York City).

EGYPTIAN GROUP
(Lower Hall)

Island of Philæ.
Pharaoh's Bed.
View of Pharaoh's Bed across the Nile.
Temple of Isis.

Pyramids and Desert.

RICHTER, GUSTAV, 1823–1884.
Building the Pyramids (The Maximilæneum, Munich).
Sphinx.
Vocal Memnon.
Abu Simbel Temple, Interior.

ROMAN AND ITALIAN GROUP
(On Stairway)

DONATELLO, 1386–1466.
St. George.
La cour dite "Du Bargello et l'escalier," Florence.

Rome.
Arch of Titus.
Castle and Bridge of St. Angelo.
Colosseum and Arch of Constantine.
Forum from Arch of Septimus Severus.
St. John Lateran — Cloisters.

Venice.
Bridge of Sighs.

Florence.
Giotto's Tower.

WAGNER, ALEXANDER, 1838–
Chariot Race.

ALMA-TADEMA, SIR LAWRENCE, 1836–1912.
Spring.

ROBBIA, LUCA DELLA, 1400–1481 (?).
Singing Boys (Museum of Santa Maria del Fiore, Florence). Cast.

ENGLISH, FRENCH, ETC., GROUP
(On Stairway)

Lincoln Cathedral.
Exterior.
Triforium.
Westminster Cathedral.
Trinity Church from Avon River.
Lichfield Cathedral.

York Cathedral.
Nave.

VISCHER, PETER, 1460–1529.
King Arthur (Innsbruck).

The Matterhorn, Switzerland.

THORWALDSEN, ALBERT BERTEL, 1770–1844.
Lion of Lucerne.

Paris.
Notre Dame Cathedral.
Madeleine.

The Alhambra, Granada.
Court of Myrtles.
Hall of Two Sisters.

GREEK GROUP
(Lower Hall)

LEIGHTON, SIR FREDERICK, 1830–1896.
Greek Girls Playing Ball.

ALMA-TADEMA, SIR LAWRENCE, 1836–1912.
Reading from Homer.

Pallas Athena (Vatican, Rome).
Venus of Milo (Louvre Gallery, Paris).
Zeus (Vatican, Rome).
Nike Tying her Sandal (Acropolis Museum, Athens). Cast.

REGNAULT, ALEXANDER, 1843–1871.
Automedon with Horses of Achilles (Museum of Fine Arts, Boston).

Athens.
The Acropolis.
Erechtheum, Porch of Caryatides.
Parthenon.
Temple of Jupiter.

(Upper Hall)

COROT, JEAN BAPTISTE, 1796–1875.
Dance of Nymphs (Louvre Gallery, Paris).
Spring (Louvre Gallery, Paris).

CHARDIN, JEAN BAPTISTE, 1699–1779.
Old Woman (Musée de Lille).

MURILLO, BARTOLOMÉ, 1618–1682.
Holy Family (Louvre Gallery, Paris).

VELASQUEZ, DIEGO RODRIGUEZ. 1599–1660.
Æsop (Prado Gallery Madrid)
Surrender of Breda (Prado Gallery, Madrid).

BOTTICELLI, ALESSANDRO, 1446–1510.
Madonna of the Magnificat (Uffizi Gallery, Florence).

LIPPI, FRA FILIPPO, 1406 (?)–1469.
Madonna and Child (Uffizi Gallery, Florence).

RAPHAEL SANZIO, 1483–1520.
Madonna of the Goldfinch (Uffizi Gallery, Florence).

SARTO, ANDREA DEL, 1486–1531.
Madonna del Arpie (Uffizi Gallery, Florence).

TITIAN, 1477–1576.
Assumption (The Academy, Venice).
Charles V at the Battle of Muehlberg (Prado Gallery, Madrid).

VINCI, LEONARDO DA, 1452–1519.
Last Supper (Santa Maria della Grazie, Milan).
Mona Lisa (Louvre Gallery, Paris).

DYCK, ANTON VAN, 1599–1641.
Painter Jordaens and his Family.

HALS, FRANS, 1584–1666.
Laughing Cavalier (Wallace Collection, London).

HOBBEMA, MEYNDERT, 1638–1709.
The Mill.

REMBRANDT VAN RYN, 1607–1669.
Night Watch (Rijks Museum, Amsterdam).
Portrait of the Artist (Pitti Palace, Florence).
Shipbuilder and his Wife (Buckingham Palace, London).

RUBENS, PETER PAUL, 1577–1640.
A Child of the Artist (Berlin Gallery).

MICHELANGELO, BUONARROTI, 1475–1564.
The Virgin, Child, and St. John (National Museum, Florence). Cast.

ROBBIA, LUCA DELLA, 1400–1481 (?).
Choir Boys. Boys Playing Trumpets (Museum of Santa Maria del Fiore, Florence). Cast.

THORWALDSEN, ALBERT BERTEL, 1770–1844.
Morning. Cast.
Night. Cast.

GRADE 5, ROOM 5

ADAN, ÉMILE, 1839–
End of Day.

DESSAR, LOUIS PAUL, 1867–
Plowing.

DYCK, ANTON VAN, 1599–1641.
Children of Charles I (Royal Gallery, Dresden).
William II of Nassau (Hermitage Gallery, St. Petersburg).

MESDAG, HENDRIK WILLEM, 1831–
At Anchor.

MILLET, JEAN FRANÇOIS, 1814–1875.
The Sower (Metropolitan Museum, New York).

MURILLO, BARTOLOMÉ ESTÉBAN, 1618–1682.
Children of the Shell (Prado Gallery, Madrid).

RENOUF, ÉMILE, 1845–1894.
The Helping Hand.

REYNOLDS, SIR JOSHUA, 1723–1792.
Angels' Heads.

GRADE 5, ROOM 6

BONHEUR, ROSA, 1822–1899.
Oxen Plowing (Luxembourg Museum, Paris).

CLAYS, PAUL JEAN, 1819–1900.
Calm Day.

DAGNAN-BOUVERET, PASCAL, 1852–
Madonna of the Arbor.

DUPRÉ, JULIEN, 1851–
The Balloon (Metropolitan Museum, New York).

HOMER, WINSLOW, 1836–1910.
All's Well (Museum of Fine Arts, Boston).

LANDSEER, SIR EDWIN HENRY, 1802–1873.
Shoeing the Bay Mare (National Gallery, London).

MILLET, JEAN FRANÇOIS, 1814–1875.
The Angelus.

NOURSE, ELIZABETH.
Mother and Children.

VELASQUEZ, DIEGO RODRIGUEZ, 1599–1660.
Don Balthazar Carlos (Prado Gallery, Madrid).

GRADE 5, ROOM 7

CHURCH, FREDERICK EDWIN, 1828–1900.
The Great Fall at Niagara (Corcoran Art Gallery, Washington, D. C.).

CORREGGIO, 1494 (?)–1534.
Holy Night (Dresden Gallery).

DUPRÉ, JULIEN, 1851–
Drinking-trough.

HAAS, JOHANNES DE, 1832–1880.
Moonlight (Morgan Art Museum, Hartford, Conn.).

MANET, ÉDOUARD, 1833–1883.
Boy with a Sword (Metropolitan Museum, New York).

MILLET, JEAN FRANÇOIS, 1814–1875.
Feeding her Birds (Lille Museum, Lille, France).

RAPHAEL SANZIO, 1483–1520.
Cherubs. Detail of Sistine Madonna, (Dresden Gallery).

RIECKE, GEORGE, 1843–
Sunset Glow.

TROYON, CONSTANT, 1810–1865.
Oxen Going to Work (Louvre Gallery, Paris).

GRADE 6, ROOM 8

DAGNAN-BOUVERET, PASCAL, 1852–
At the Watering-trough.

JACQUE, CHARLES ÉMILE, 1813–1894.
A Sheep-fold.

MILLET, JEAN FRANÇOIS, 1814–1875.
Planting Potatoes (Quincy Shaw Collection, Boston).
Shepherd Tending his Flock.

MURILLO, BARTOLOMÉ ESTÉBAN, 1618–1682.
Madonna of the Rosary (Prado Gallery, Madrid).

REYNOLDS, SIR JOSHUA, 1723–1792.
Simplicity (Miss Gwatkin).

SCHREYER, ADOLPHE, 1828–1899.
Arabs Making a Detour.

SULLY, THOMAS, 1783–1892.
The Torn Hat.

VOLK, DOUGLAS, 1856–
A Young Pioneer.

GRADE 6, ROOM 9

BRETON, JULES ADOLPHE, 1827–1906.
Shepherd's Star (Chicago Art Institute).

CARPACCIO, VITTORE, 1450 (?)–1522 (?).
Angel with a Mandolin (Academy, Venice).

COROT, JEAN BAPTISTE CAMILLE, 1798–1875.
Souvenir of Italy (Louvre Gallery, Paris).

DUPRÉ, JULIEN, 1851–
Escaped Cow.

HOBBEMA, MEYNDERT, 1638–1709.
The Avenue, Middleharnis (National Gallery, London).

LEROLLE, HENRI, 1851–
By the River Side (Museum of Fine Arts, Boston).

MARCKE, ÉMILE VAN, 1827–1890.
Golden Autumn Day.

MURILLO, BARTOLOMÉ ESTÉBAN, 1618–1682.
St. Anthony of Padua, (Berlin Gallery).

RAPHAEL SANZIO, 1483–1520.
Madonna del Gran Duca (Pitti Gallery, Florence).

GRADE 6, ROOM 20

BURNE-JONES, SIR EDWARD, 1833–1898.
Hope.
Golden Stairs.

EBEL, FRITZ.
A Corner of the Woods.

HOMER, WINSLOW, 1838–1910.
Fog Warning (Museum of Fine Arts, Boston).
High Cliff, Coast of Maine.

LEROLLE, HENRI, 1851–
Arrival of the Shepherds.

MARCKE, ÉMILE VAN, 1827–1890.
Water-gate (Layton Gallery, Milwaukee).

MILLET, JEAN FRANÇOIS, 1814–1875.
Gleaners (Louvre Gallery, Paris).

MURILLO, BARTOLOMÉ, 1618–1682.
Virgin and Child Jesus (Pitti Palace, Florence).

RAPHAEL SANZIO, 1483–1520.
St. Paul (Academy, Venice).

REYNOLDS, SIR JOSHUA, 1723–1792.
Age of Innocence (National Gallery, London).

WATTS, GEORGE FREDERICK, 1817–1904.
Sir Galahad (Eton College Chapel).

GRADE 7, ROOM 7

COROT, JEAN BAPTISTE CAMILLE, 1796–1875.
Le Pont de Palluel.

ISRAELS, JOZEF, 1824–1911.
The Frugal Meal.

MICHELANGELO, BUONARROTI, 1475–1564.
Delphic Sibyl (Sistine Chapel, Rome).

RAPHAEL SANZIO, 1483–1520.
St. Michael (Louvre Gallery, Paris).

RENI, GUIDO.
Aurora (Rospigliosi Palace, Rome).

SARTO, ANDREA DEL, 1486–1531.
St. John the Baptist (Pitti Gallery, Florence).

TITIAN, 1477–1576.
Virgin, Child, and St. John (Uffizi Gallery, Florence).

TROYON, CONSTANT, 1810–1865.
Return to the Farm.

VELASQUEZ, DIEGO RODRIGUEZ, 1599–1660.
The Forge of Vulcan (Prado Gallery, Madrid).

GRADE 7, ROOM 18

BONHEUR, ROSA, 1822–1899.
Horse Fair (Metropolitan Museum, New York).

INNESS, GEORGE, 1825–1894.
The Coming Storm.

LEIGHTON, SIR FREDERICK, 1830–1896.
Captive Andromache (Art Gallery, Manchester, England).

LEROLLE, HENRI, 1851–
Shepherdess (Luxembourg, Paris).

MELOZZO DA FORLI, 1438–1494.
Angel with Mandolin (Sacristy of St. Peter's Rome).
Angel with Viola (Sacristy of St. Peter's, Rome).

MURILLO, BARTOLOMÉ ESTÉBAN, 1618–1682.
The Melon Eaters (Pinakothek, Munich).

Parthenon, Athens. A detail.

RAPHAEL SANZIO, 1483–1520.
Madonna della Tenda (Pinakothek, Munich).

GRADE 7, ROOM 19

BRETON, JULES ADOLPHE, 1827–1906.
Song of the Lark (Art Institute, Chicago).

DYCK, ANTON VAN, 1599–1641.
Repose in Egypt (Pitti Gallery, Florence).

INNESS, GEORGE, 1825–1894.
Autumn Gold (Morgan Art Museum, Hartford).

MILLET, JEAN FRANÇOIS, 1814–1875.
Shepherdess (Museum of Fine Arts, Boston).

PALMA, GIACOMO, 1480 (?)–1528.
St. Barbara (Santa Maria Formosa, Venice).

REMBRANDT VAN RYN, 1607–1669.
Polish Rider (Frick Collection, Pittsburgh).
Syndics of the Draper (Rijks Museum, Amsterdam).

RENI, GUIDO, 1575–1642.
St. Michael and the Dragon (Santa Maria della Concezione, Rome).

RUBENS, PETER PAUL, 1577–1640.
The Artist's Sons (Liechtenstein Gallery, Vienna).

RUISDAEL, JACOB VAN, 1625 (?)–1682.
The Windmill (Rijks Museum, Amsterdam).

TURNER, JOSEPH MALLORD, 1775–1851.
Ulysses Deriding Polyphemus (National Gallery, London).

VINCI, LEONARDO DA, 1452–1519.
Madonna of the Rocks (National Gallery, London).

GRADE 8, ROOM 13

BRADFORD, WILLIAM, 1827–1892.
Whale Ship Homeward Bound (Art Institute, Chicago).

BRUSH, GEORGE DE FOREST, 1855–
Mother and Child (Museum of Fine Arts, Boston).

HOOCH, PIETER DE, 1632 (?)–1681.
A Dutch Living-room.

MAUVE, ANTON, 1838–1888.
Spring (Metropolitan Museum of Art, New York).

RAPHAEL SANZIO, 1483–1520.
Sistine Madonna (Dresden Gallery).

REMBRANDT VAN RYN, 1607–1669.
Portrait of Coppenol (The Hermitage Gallery, St. Petersburg).

THAYER, ABBOTT HANDERSON, 1849–
Caritas (Museum of Fine Arts, Boston).

VELASQUEZ, DIEGO RODRIGUEZ, 1599–1660.
The Tapestry Weavers (Prado Gallery, Madrid).

GRADE 8, ROOM 15

GAINSBOROUGH, THOMAS, 1727–1788.
Portrait of Mrs. Siddons (National Gallery, London).

HALS, FRANS, 1584–1666.
The Jester (Rijks Museum, Amsterdam).

INNESS, GEORGE, 1825–1894.
Landscape (Art Institute, Chicago).

L'HERMITTE, LÉON AUGUSTIN, 1844–
Among the Lowly (Metropolitan Museum, New York).

LOEB, LOUIS, 1866–
Temple of the Winds (Metropolitan Museum, New York).

MCCORD, GEORGE HERBERT, 1840–1909.
Evening in the Harbor.

MAES, NICHOLAS, 1632–1693.
Old Woman Paring Apples (Berlin Gallery).

ROMANO, GIULIO, 1492–1546.
Dance of Apollo and the Muses (Pitti Gallery, Florence).

WHISTLER, JAMES ABBOTT MCNEILL, 1834–1903.
Portrait of the Artist's Mother (National Gallery, London).

ZÜGEL, HEINRICH JOHANN, 1850–
The Old Shepherd (Morgan Museum, Hartford, Conn.).

GRADE 9, ROOM 14

ABBEY, EDWIN AUSTIN, 1852–1911.
Sir Galahad the Deliverer (Boston Public Library).

ALEXANDER, JOHN W., 1856–
Walt Whitman (Metropolitan Museum, New York).

BENSON, FRANK W., 1862–
Spring (Library of Congress, Washington).
Winter (Library of Congress, Washington).

EGGLESTON, BENJAMIN.
Dawn.

MILLET, JEAN FRANÇOIS, 1814–1875.
Spring.

RUISDAEL, JACOB VAN, 1625 (?)–1682.
The Cascade (National Museum, Amsterdam).

TOULMOUCHE, AUGUSTE, 1829–1890.
Good-night.

GRADE 9, ROOM 16

BASTIEN-LEPAGE, JULES, 1848–1884.
Joan of Arc (Metropolitan Museum, New York).

CLAYS, PAUL JEAN, 1819–1900.
Marine and Vessels (Art Institute, Chicago).

KNAUS, LUDWIG, 1829–1910.
Holy Family (Metropolitan Museum, New York).

MAUVE, ANTON, 1838–1888.
Autumn (Metropolitan Museum, New York).

MILLET, JEAN FRANÇOIS, 1814–1875.
The Shepherdess.

SARGENT, JOHN SINGER, 1856–
Frieze of the Prophets (Boston Public Library).

TROYON, CONSTANT, 1810–1865.
Oxen Ploughing (Museum of Fine Arts, Boston).

WHAT THE LEADERS ARE DOING

Good Ideas from Everywhere

PRIMARY

PICTURES OF GRASSES AND SEDGES. Nothing better has yet been discovered for the first lessons with the primary children. Fold a piece of 9 × 12 paper to divide it into two sheets 6 × 9. Place these with the long edges vertical on the desk. On the left-hand sheet arrange a single stalk of grass or sedge. Make a drawing of it on the right-hand sheet, using colored pencils, emphasizing color and direction of main lines of growth. Plate I, Fig. 1, gives a drawing of a grass by Elizabeth Leeds, a five-year-old in Newton, Mass. Repeat with other specimens.

The second-grade children may have sprays of aster, fall dandelion, etc., and pay special attention to the branching, the angle at which the stems divide, and the relative lengths of the stems. Figures 2 and 3 are good examples of this grade of work.

SEED PACKS. The term seed pack includes all sorts of pods, berries, etc., containing seed. The second- and third-grade children enjoy drawing from such objects, partly because of their pretty colors and odd forms. In representing these with colored crayon or water color, emphasize the relative proportion of parts, and match the colors as closely as possible. Plate IV, Fig. 1, shows a drawing in ink from a head of oats, by a primary pupil, Guy Massey, Sidney, N. Y.

THE STANDARD COLORS. Along with the study of the nature specimens, lessons in color should be given that the children may be ready for the brilliant autumnal coloring when it arrives. One of the best of color booklets is that shown on Plate II. This was made of sheets of paper 6 × 9, folded to produce pages 3 × 9. Three sheets thus produce a book of six leaves, bound with thread. The first leaf is reserved for the cover. On the second leaf (the third page) the standard colors begin, red first. Each of the six standard colors has a page similar to that shown in the illustration, and an oblong at the top, well placed, giving the standard color full intensity, and below the names of such objects as the child can discover having that particular color. The children are then allowed to select the color which they love best. With this color the front and back covers are colored. The words, Color Book, and the name of the pupil are added to the front cover as shown in the illustration.

SKY BABIES. An outline of a baby in long clothes, like that shown in Plate II at the left, can be easily hektographed and printed on narrow sheets of white paper for the children to color. The dress is to be colored uniformly with one of the standard colors. The paper can be clipped into the form of a bookmark as shown in the illustration, or the outlines may be cut and the babies used as bookmarks.

"Here is a cute bit that might be inserted in the primary outline for rainbow study in the September number." F. H. D.

THE RAINBOW

Two little clouds one summer day
  Went floating through the sky;
They went so fast they bumped their heads
  And so began to cry.

Old Father Time looked down and said,
  "O, never mind, my dears,
I'll send my little fairy folk
  To dry your falling tears."

One fairy came in *red* so fine,
  And one in *orange* bright;
Then *yellow*, *green*, *blue*, *violet*,
  Were all at once in sight.

They wiped the cloud tears all away,
  And then from out the sky
Upon a line the sunbeams made
  They hung their gowns to dry.

RAINBOW DROPS. These are illustrated in the upper right corner, Plate II, and may be used in various ways, either for the standard colors, or a color with its tint and shade, or for three hues of color. The children enjoy adding the features and

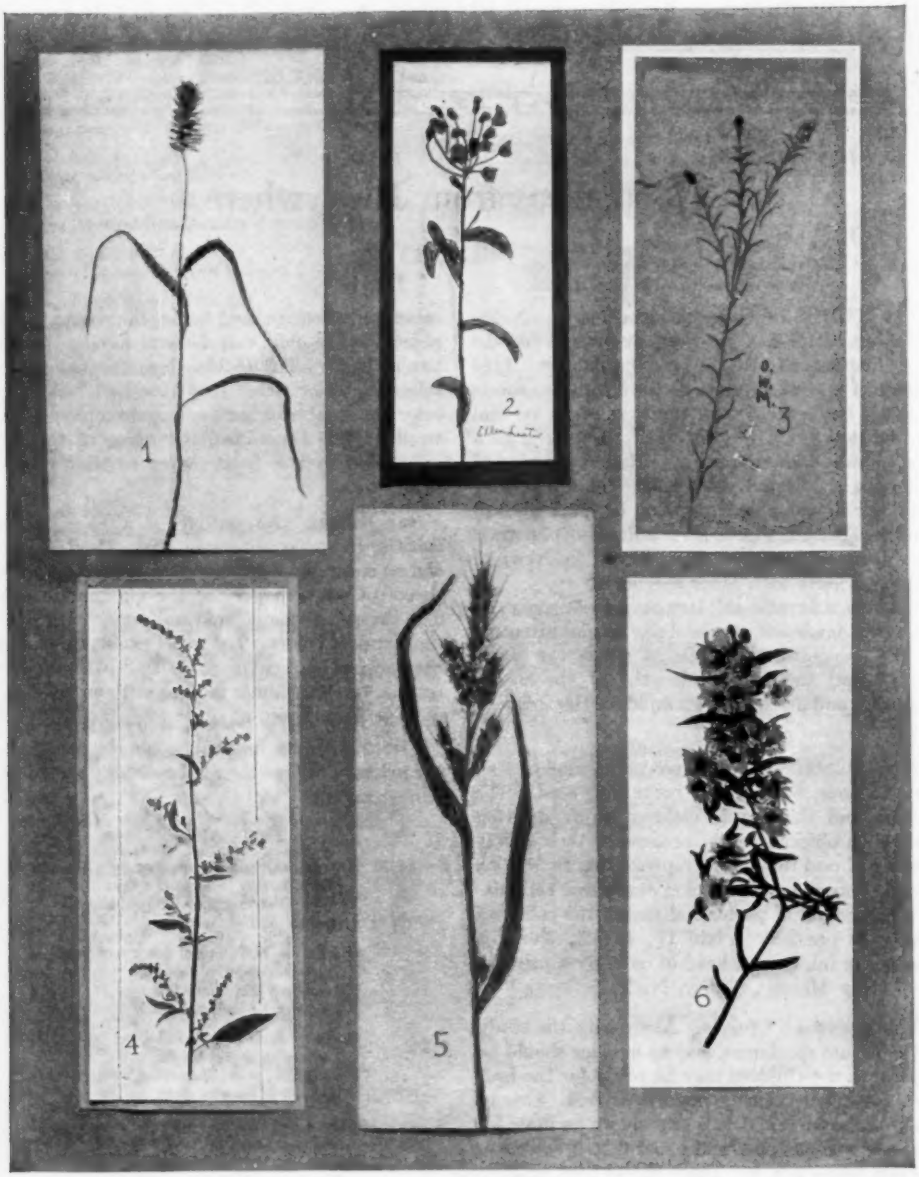


PLATE I. From grade to grade there should be a notable improvement in the skill with which the natural specimens are rendered.

the legs in pencil to give different expression to each drop. They may also be grouped at will, to express different relationships.

MATCHING COLORS. An exercise that third-grade children enjoy is matching as closely as possible the colors of printed materials, like wall paper, muslins, etc. One sheet of this kind is illustrated in Plate II. A piece of cloth having a white ground upon which the pattern is printed in red is pasted upon the upper part of the sheet and the two colors are matched as closely as possible

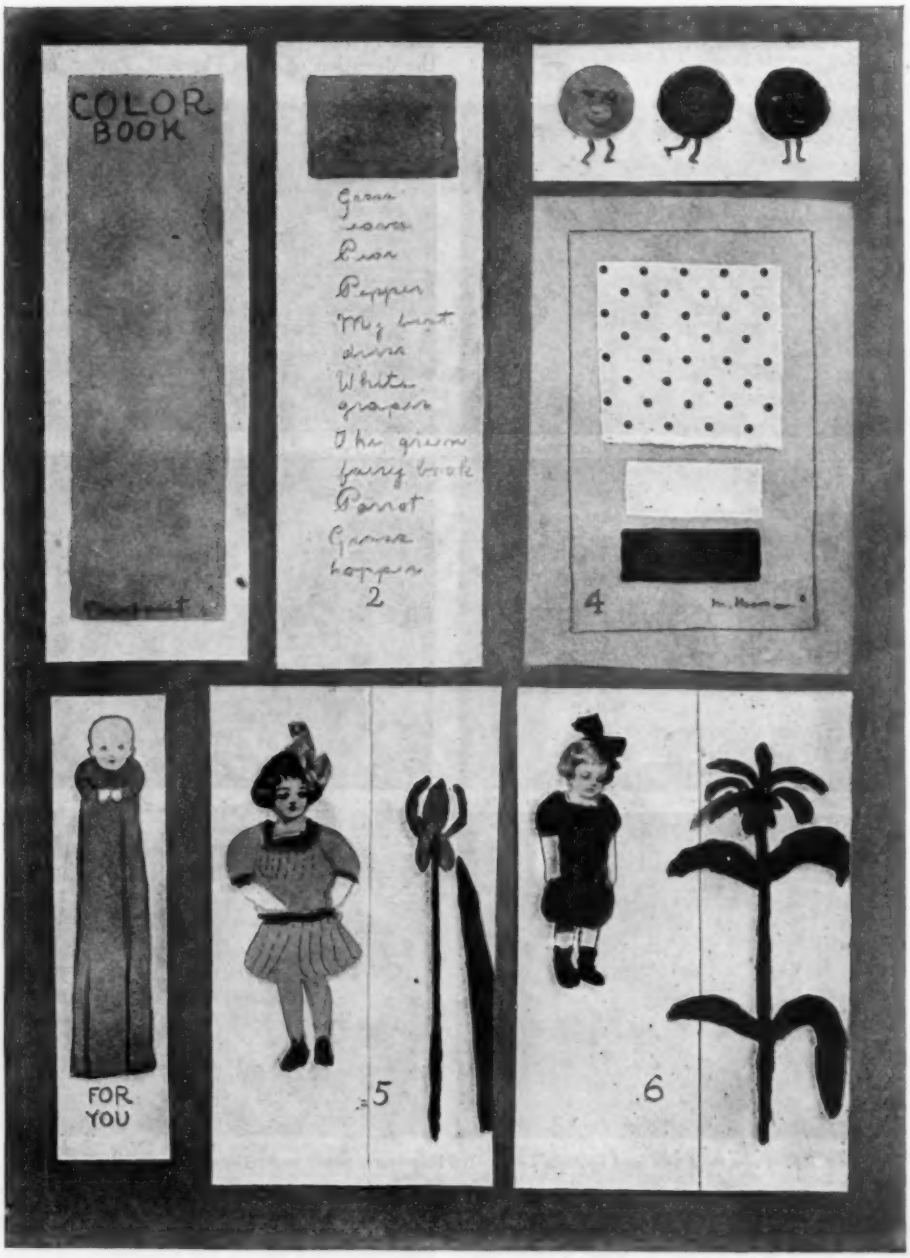


PLATE II. Successful projects in color for primary children.

in the lower part of the sheet, the whole well arranged with proper margin line. The aim of all this work is to familiarize the children with color and to give them practice in coloring with the crayon or brush.

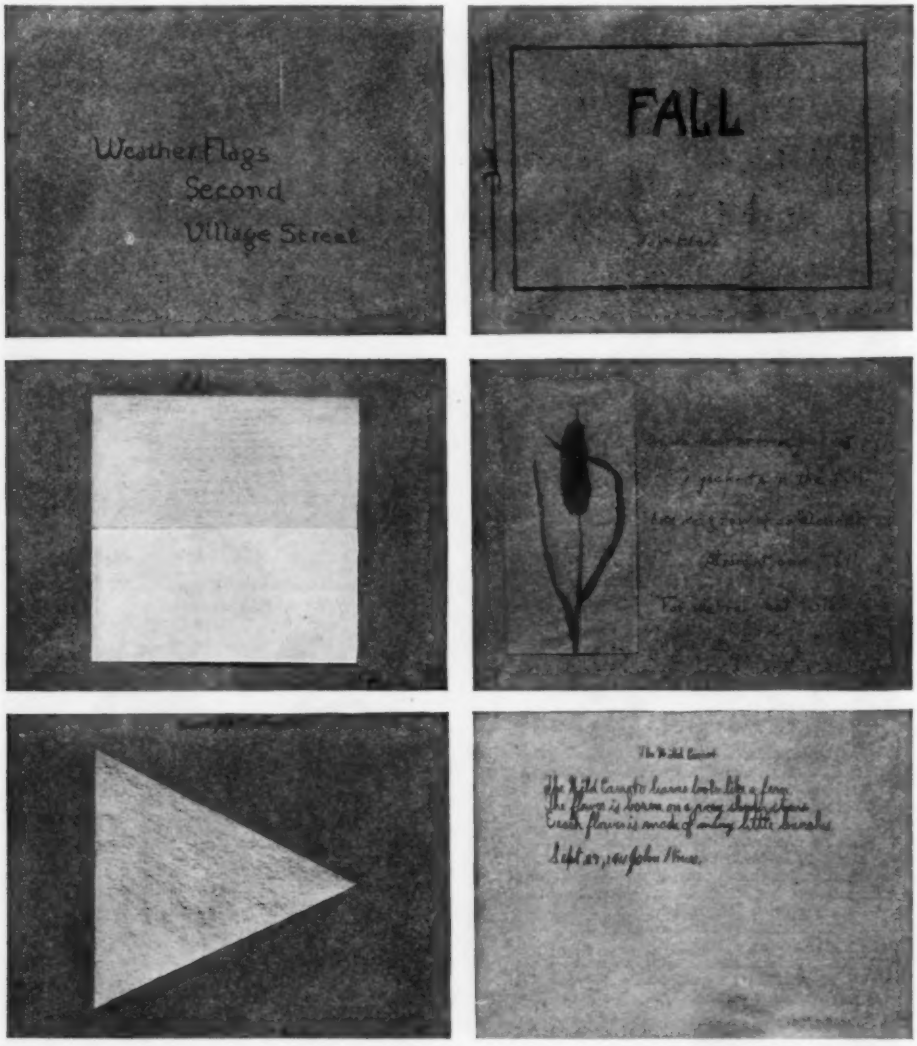


PLATE III. Pages from two good booklets constructed by primary pupils under the direction of Miss Potter, Johnstown, Pa.

CONSTRUCTIVE WORK. In the primary grades this often must be confined to work with paper, owing to lack of other available material. Two good examples of this sort of work are shown on Plate III. The sheets at the left show three pages of a booklet made by second-year pupils, based on the weather signals used by the United States government and displayed in all the large cities and towns. This particular booklet was made under the direction of Miss Flora B. Potter, of Johnstown, Pa., who says that the working out of the weather signals affords fine practice in learning the ruler and in measuring. The signals are made in miniature from paper, colored with crayon or water color, and attached to the leaves of the book,

with a word indicating the significance of each. The pages at the right on Plate III are from a fall booklet, made under the direction of Miss Potter, by third-year pupils. Such a booklet as this shows how drawing and nature work may be carried along together during September and October.

GRAMMAR

Plant Portraits. In every grade of the grammar schools during the month of September such studies should be made directly from the object, in pencil, colored crayon, and water color, according to the subject and the aim of the lesson. Plate I shows an orderly progress in work of this kind. Figure 1 represents the simplest subject drawn in colored crayon. This particular sheet was produced by a five-year-old pupil, but if as good work is secured in a fourth grade, teachers should feel pretty well satisfied. Figure 2 is a crayon drawing by a nine-year-old pupil; Figure 3 by a ten-year-old. Figure 4 is a drawing of a spray of sorrel in bloom, by a fifth-grade boy, Jack Hance, Wyncote, Pa. The spray of grass, Figure 5, is a crayon drawing by Mamie Hendrickson, a sixth-grade girl, Laurium, Michigan. The astonishingly good water-color drawing from a spray of purple asters, Figure 6, is by a ninth-grade pupil, Mabel I. Mattis, Upper Roxboro, Philadelphia, Pa. These drawings show successively a better grasp of the subject and more skill in interpretation, such as one might expect to secure from the fourth grade to the ninth.

Plant Studies. In the grammar grades the plants may be studied, not merely for portraiture, but for certain specific effects. Plate IV illustrates work of this kind. Sheet 1 is a study of a head of oats for the movement or gesture, a drawing in ink silhouette. Sheet 2 is a study of clover in pencil for its details of growth, its anatomy, so to speak. This is a thoughtful pencil drawing by H. R., town not given. Sheet 3 is a study of local colors, a bunch of wild grapes, by Rowena Connell, Grade VIII, Winchester, Mass. In the original no two of the grapes are the same color. Each spot records the local color of that part of the object, as accurately as possible. Sheet 4 on that plate is an attempt to render the color effect of the golden-rod as seen growing in the sunshine. This is a water color on a white ground by Tina Schwabe, a seventh-grade pupil, Mankato, Minn. The aim is not local color but the total color effect in sunlight in the open air. These indicate, in a general way, worthy successive aims, from fourth to eighth grade.

Color Studies. In the lower grammar grades the work begun in the primary years should be continued. The color books may be larger and richer, with pages giving tints and shades of each standard color, and groups of hues with the purest possible washes. Plate III shows the cover of a color book, the graded wash being made by Merle Dion, Grade V, Saxtons River, Vt.

Plant Analysis for Color. Such an exercise as that illustrated by Sheet 2, Plate V, an analysis of the trout lily (dog-tooth violet), by Sallie Andrews, Westerly, R. I., is an eye-opener to most children. The colors of the flower and of the foliage are matched as closely as possible in hue and in relative area and arranged upon a sheet together with a drawing of the plant itself.

The Color Circuit. By the time the pupils reach the middle grammar grades they should know the spectrum circuit with the opposite divisions colored with complementary colors. The circuit shown on Sheet 3 was made by Evalyn Nedro, a fifth-grade pupil, Painesville, Ohio. Unfortunately, the relative values in color never reproduce well in halftone.

Beautiful Coloring. This desirable result can come through practice only. Let the pupil select some pattern for embroidery which is at once good and likable for its design, tint a piece of paper to the color of goods they would find it becoming to wear, copy upon it in pencil outline or otherwise the pattern, and then proceed to color it to produce a harmony of color. Figure 4 in Plate V will suggest the results. This particular pattern was an original design by William Owens, VII, Westerly, R. I. The use of a printed outline for coloring is to be commended when the design is good. Ornamental motto cards, postcards, place cards, etc., furnish opportunities for such work. Illustration 5, a printed outline colored by Rollo Griffin, VI, Everett, Wash., will serve as an example. The aim is beauty; skill of hand is a valuable by-product.

Historic Coloring. If good examples are at hand there is, perhaps, no better training to secure good technique in color than that of copying as accurately as possible some specimen of historic work such as that shown on Sheet 6, Plate V, by Lenora Draper, a ninth-grade pupil, Pontiac, Michigan. This particular design was copied from an Egyptian border taken from a mummy case.

Fall Booklets. Plate VI shows four typical pages from a fall booklet by a sixth-grade pupil, under the direction of Miss Flora B. Potter, Johnstown, Pa. This particular booklet shows the work of the three fall months. It was made in the following order: September — studies of weeds and

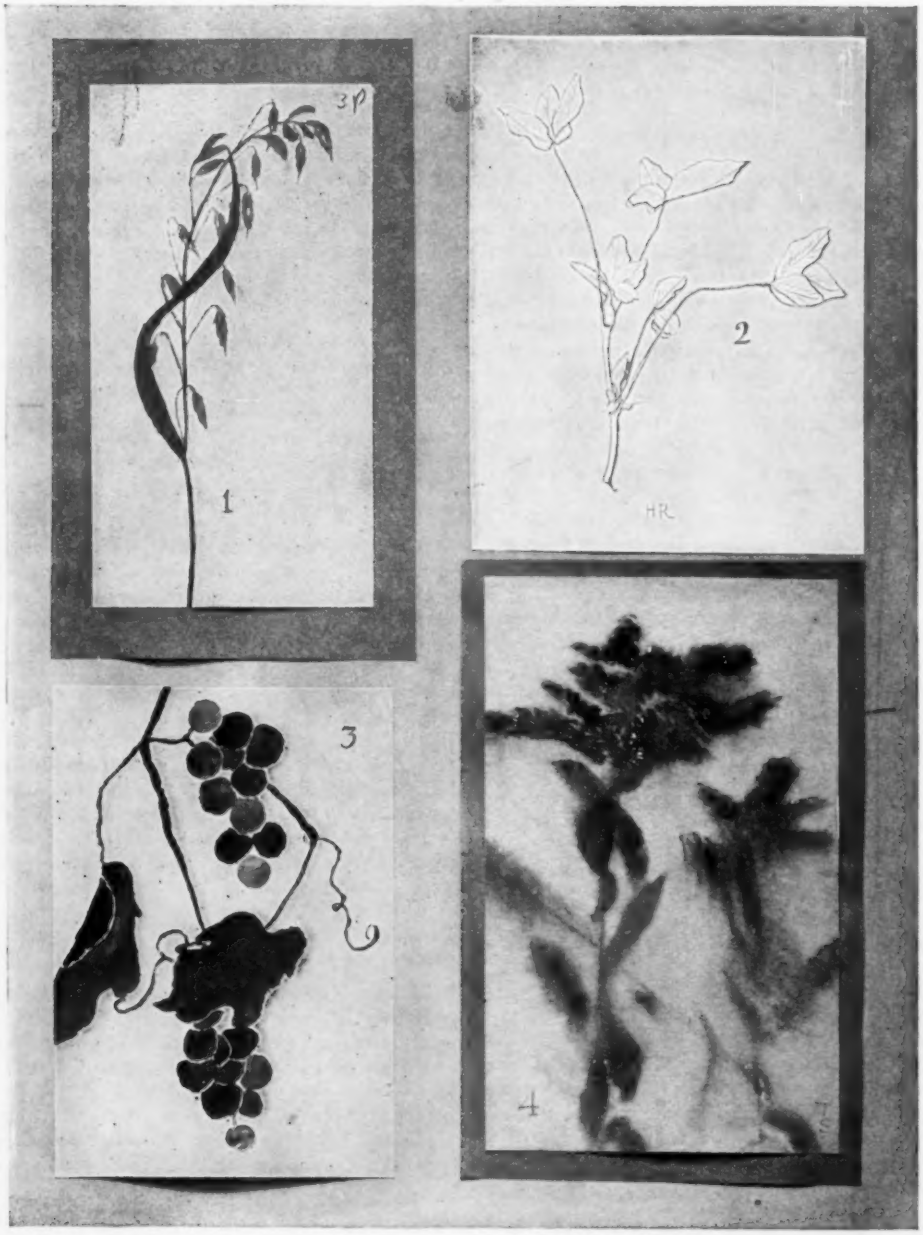


PLATE IV. In nature drawing be sure of the element to be emphasized, and select the medium which lends itself most readily to producing the desired effect.

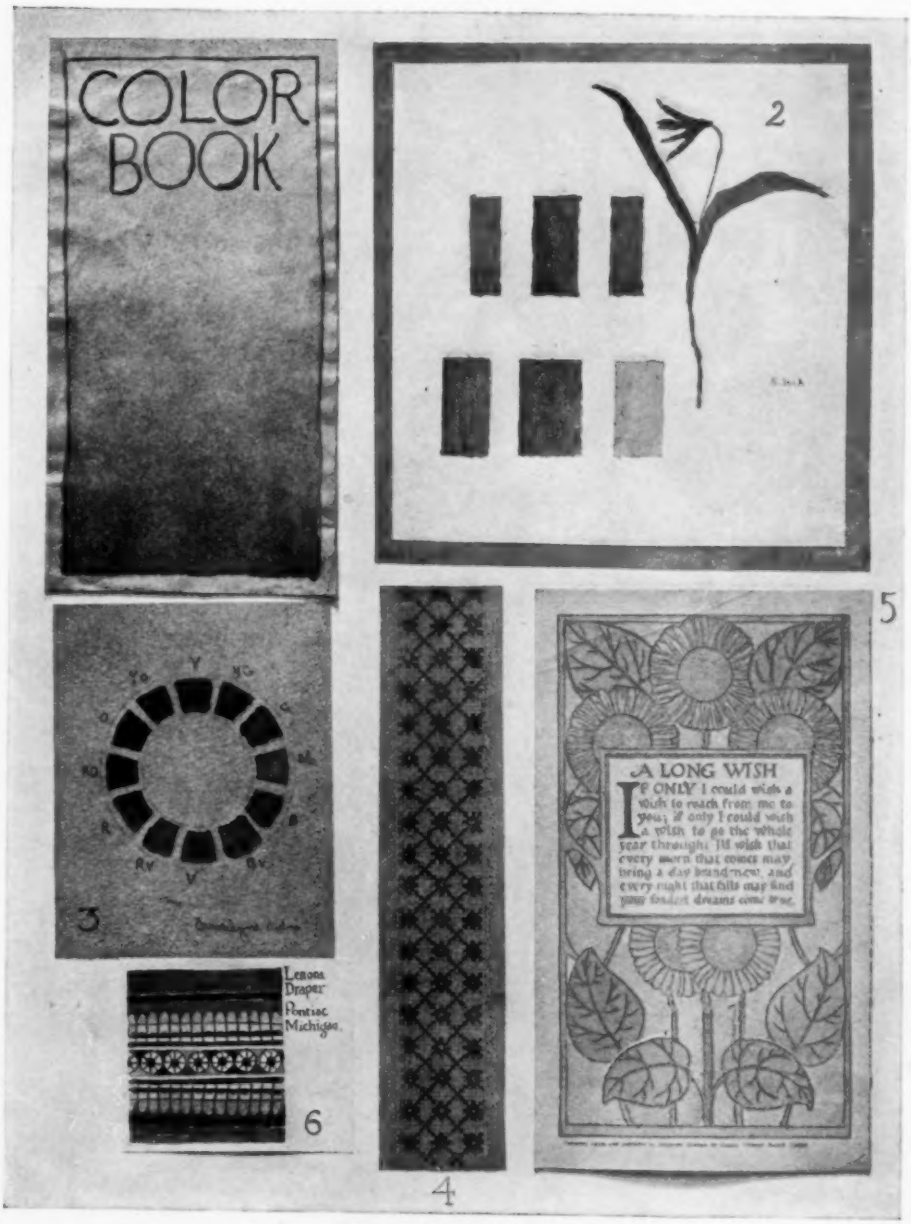


PLATE V. Successful projects in color by grammar-grade children.

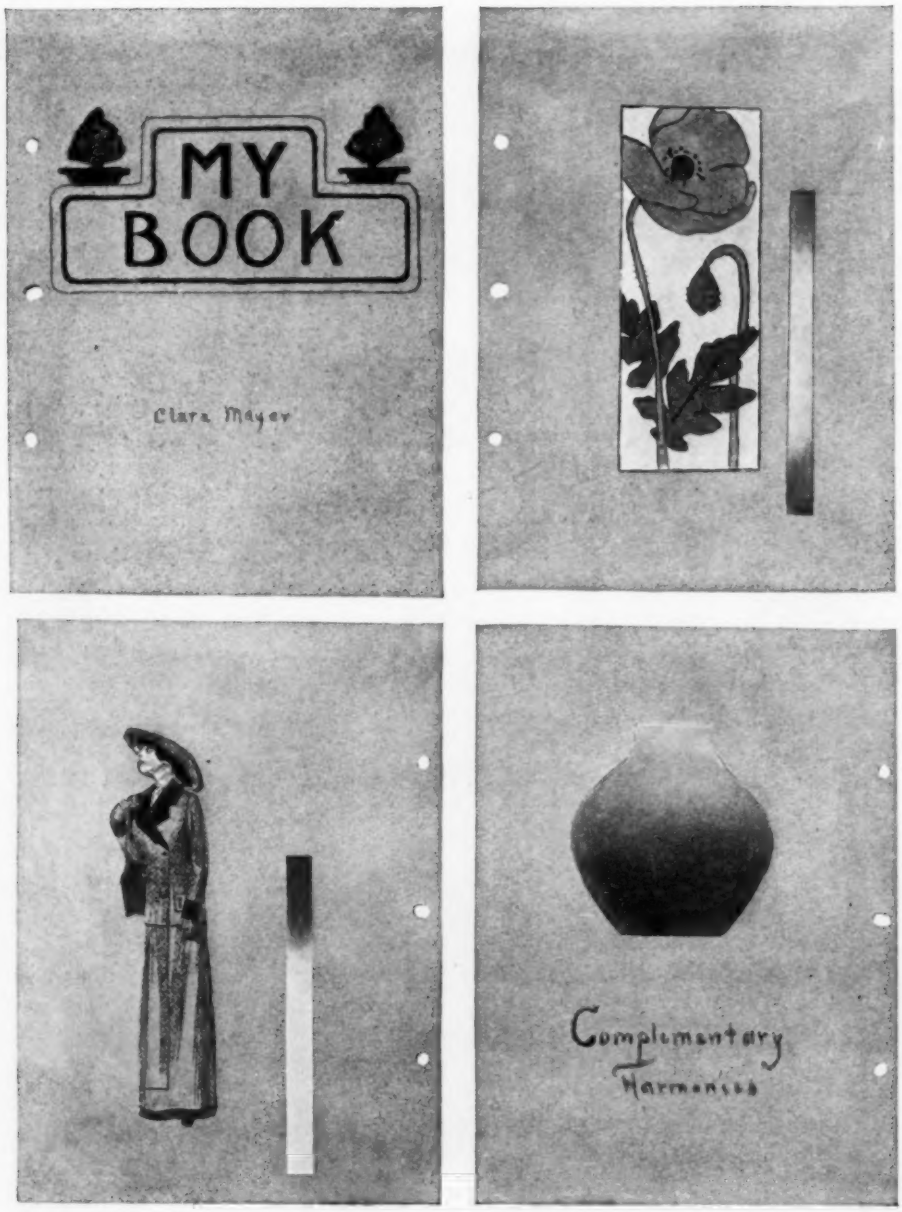


PLATE VI. Four pages from a fall booklet by sixth-grade pupils under the direction of Miss Potter, Johnstown, Pa.

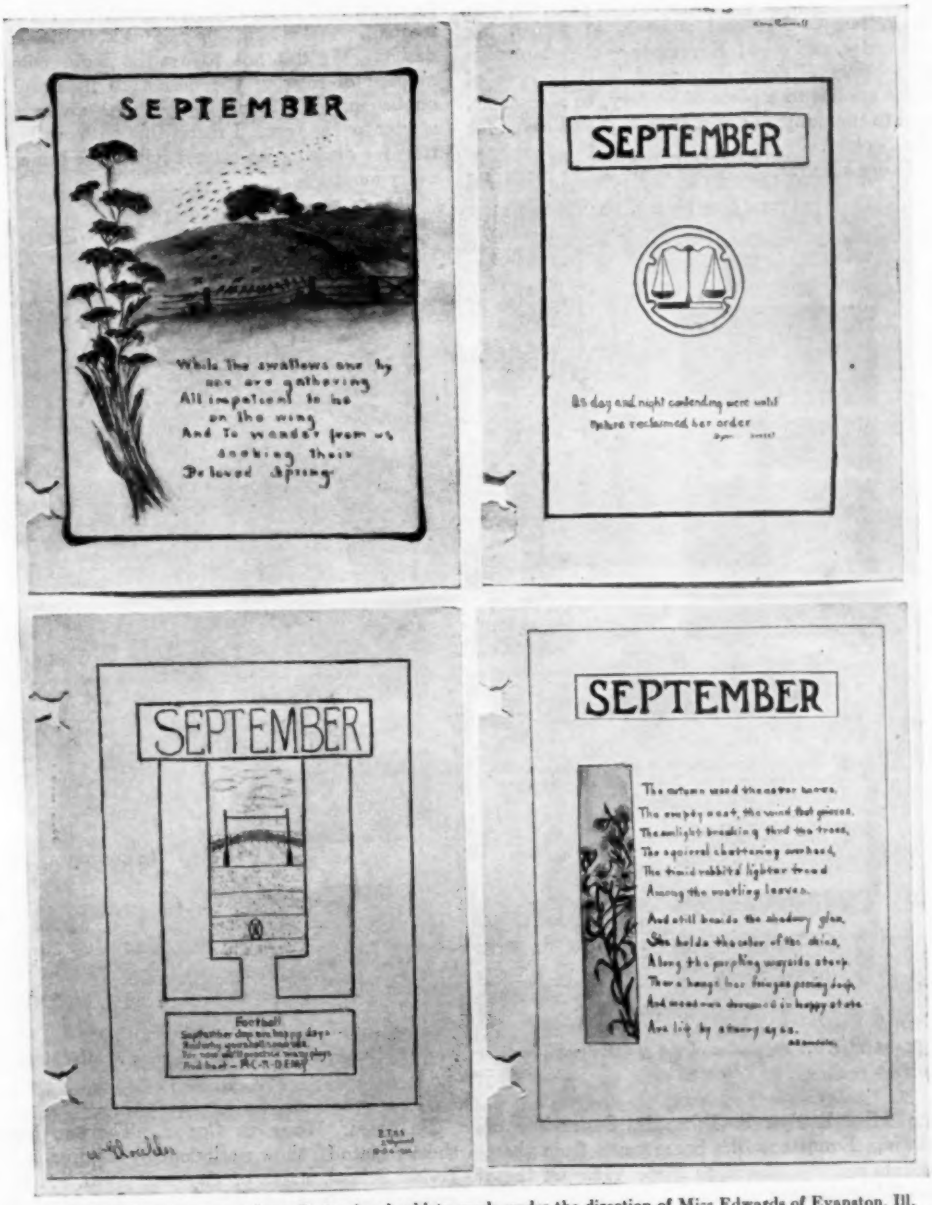

SEPTEMBER
While the swallows one by one are gathering
All impatient to be
on the wing
And to wander from us
seeking their
Beloved Spring
SEPTEMBER
SEPTEMBER
Football
SEPTEMBER
The autumn used the easter leaves.
The empty nest, the wind that grieves.
The sunlight breaking thro' the trees,
The squirrel chattering overhead,
The timid rabbits lighter tread
Among the rustling leaves.
And still beside the shadowy glen,
She holds the color of the skies,
Along the purpling wayside steep
Thro' a hanging haze foxgloves peering deep,
And meadows deepened in happy state
Are lit by starry asters.

PLATE VII. Four pages from September booklets, made under the direction of Miss Edwards of Evanston, Ill.

grasses in color, in ink silhouette, and in pencil; October — studies of seed packs, the plantain, burdock, beggar-tick, and sumach, in pencil, ink silhouette, and color; November — the adaptation of schemes of color discovered in the course of these studies to a piece of pottery, to a costume, and to the designing of a title-page and cover for the booklet.

Other admirable booklets came to the magazine from Miss Evelyn S. Edwards, Supervisor of Drawing, Evanston, Ill. Some pages from these booklets are reproduced as Plate VII. Of these Miss Edwards says:

"We began our year's work with lettering and some kind of drawing suggestive of the month. We discussed spacing, proportion, margins, and general arrangement. The work that I am sending you is entirely the pupils' own. Even the selections of materials, they made themselves. One boy went so far as to make an original verse when he could find no satisfactory quotation regarding football. The quotations were selected to fit the design. We did not follow the more common method of making the design to illustrate the quotation. We found these sheets an excellent starter for the year. I regret that with our limited time for drawing we cannot follow the same plan every month."

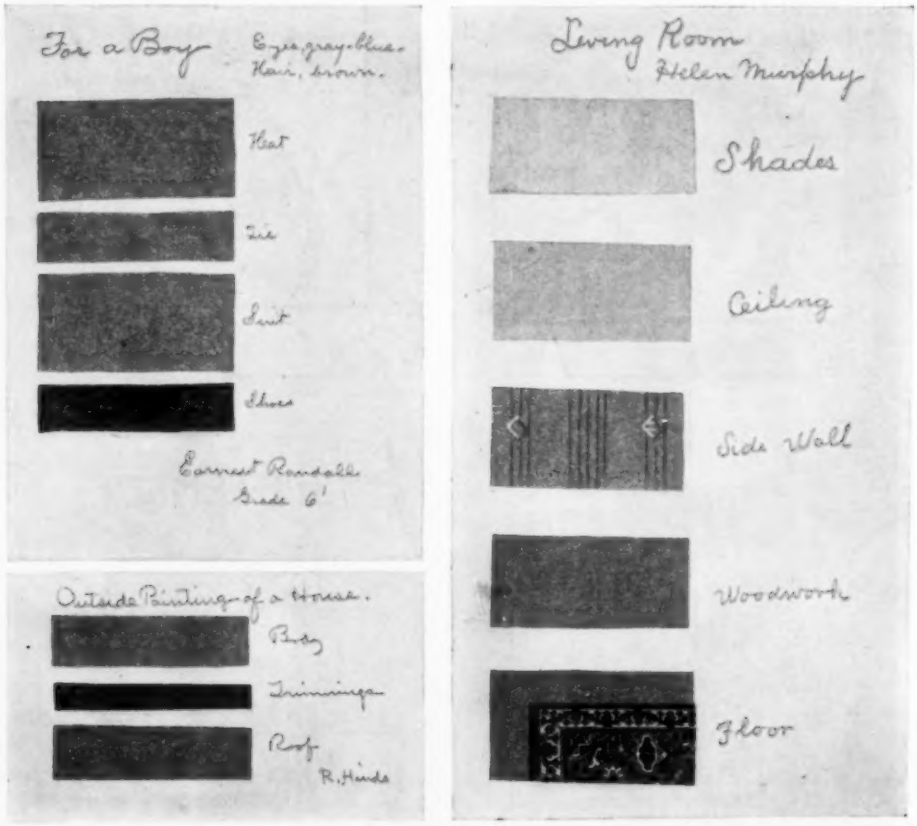


PLATE VIII. A suggestion of the practical work in the application of color, done under the direction of Miss Miett, Syracuse, N. Y.

PRACTICAL WORK IN COLOR. The two lower sheets, Plate II, show work done by children in the Irving School, name of city not given. Hektographed outlines of children are furnished the pupils who select some flower they like, discover its color scheme, and color the child's dress to correspond. The heads on these sheets are cut from advertisements and magazines.

Miss M. Matilda Miett, Director of Art, Syracuse, N. Y., has been very successful in such work

as is shown in Plate VIII. Each boy, for example, is required to specify his own color scheme, eyes, hair, general complexion, etc., and to select and put down on paper appropriate colors for his own hat, tie, suit, and shoes. Other lessons have to do with the outside painting of a house. In this case, the pupils are required to consider the immediate surroundings of the building, its size, character of architecture, neighboring houses, etc., and to select good colors for walls, trimmings, and roof. The interior of the house furnishes another opportunity for working out color harmonies. Samples of wall paper are brought to school, and from these selections are made for the walls of a given room. From this as a basis the colors are worked out for the ceiling, for the woodwork, for the shades at the windows, and for the floor coverings.

The last year that Frank Alvah Parsons, now principal of the New York School of Fine and Applied Art, was principal of the Maplewood Grammar School, Malden, Mass., the visitor would find in his building of about six hundred students not one whose clothing exhibited inharmonious colors. Mr. Parsons discovered during his last spring term at the school that no less than five families in the district had turned over the entire work of refurnishing some room in the house to some grammar-grade child who had had practical instruction in color harmony in the Maplewood School.

SEED BAGS. Both from the school and home gardens the children will be gathering seeds for next spring's planting. A good seed bag that will stand alone and hold a good many seeds can be made from a sheet of 9 × 12 paper as shown in Plate IX. Work from the center of the sheet outward, following the dimensions given in the diagram, cut on the heavy lines, fold on the dotted lines. Fold the edge A to the line B, and the edge C to the line D, to insure accuracy in the longest creases. In making up the bags, paste the upper edge of one lap E and the inner edge of that which meets it, and the lower part of each cover to the sides from the crease to the line P, so that the bag will not leak seeds. The beauty and serviceableness of the bag depend upon the way these laps are pasted.

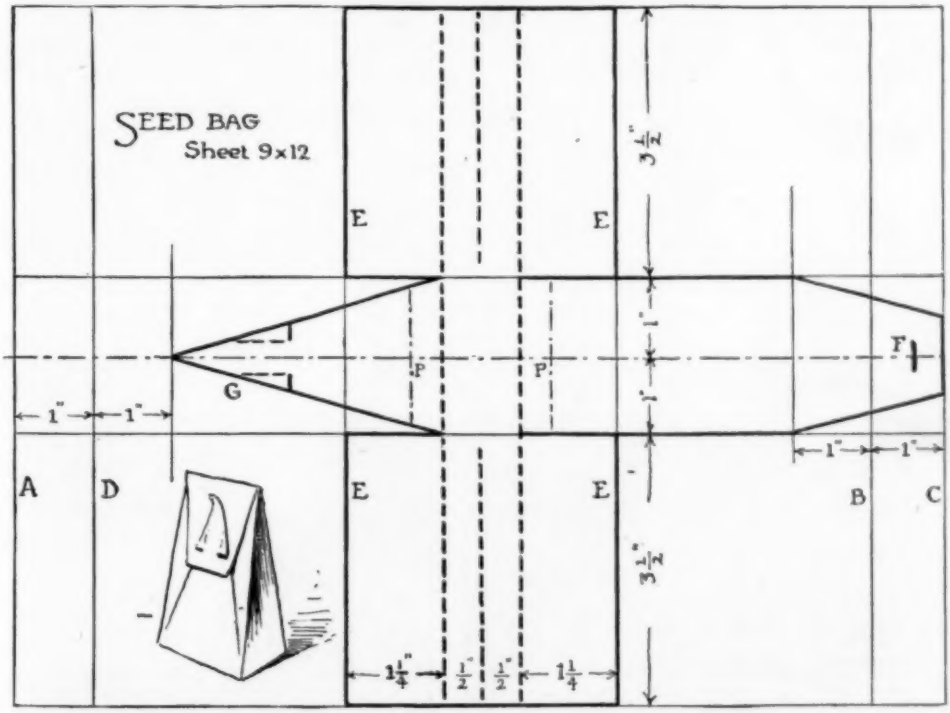


PLATE IX. Children enjoy making anything that works or looks like this seed bag.

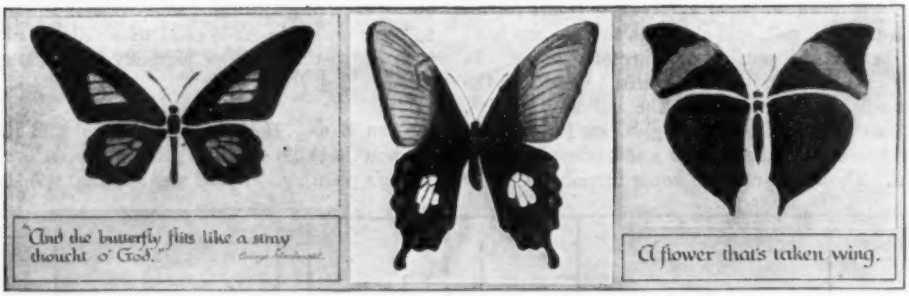


PLATE X. The butterfly, bug, beetle, or other insect is almost invariably a pleasing subject for study in conventionalization and adaptation to design uses. It is vastly more desirable to study these insects directly from nature than from prints of any kind.

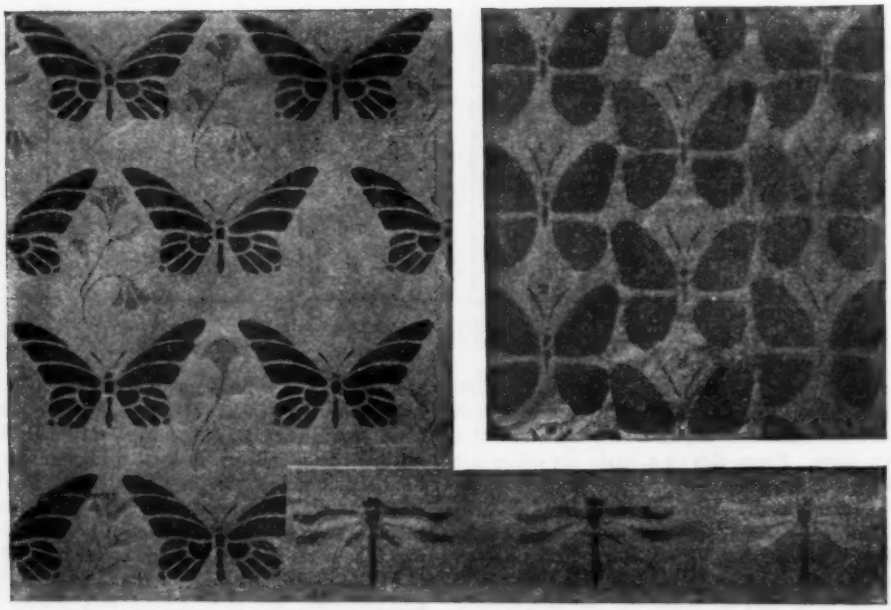


PLATE XI. The suppression of details antagonistic to a good decorative unit is an important part of designing, difficult for some students to understand.

The children will enjoy "locking" the bag by means of the folding and opening tip. The name of the seeds in the bag should be neatly printed on the side not shown in the Plate, near the top.

HIGH SCHOOL — FREEHAND

INSECT MOTIVES IN DECORATION. The butterfly, bug, beetle, or other insect is almost invariably a pleasing subject for study in conventionalization and adaptation to design uses. In previous numbers of THE SCHOOL ARTS BOOK under this high school heading, can be found reproductions of careful pencil studies of butterflies. Others treated in water color are shown in the present number. It is vastly more desirable to study these insects directly from nature than from prints of any kind.

The delicate but sharp markings of the actual body and wings convey much more clearly the sense of construction necessary to any good design, than can a printed picture. Viewing the real insect from different angles and under different lightings increases the interest and excites a greater decorative desire than can be aroused from the unchanging product of the printing press. Lacking the real specimens, the lithograph or other type of color print is by all means desirable.

The main divisions of the body and the important ribs of the wings are the necessary parts to be accented in any well-thought-out insect decoration. It is amazing how crude the notions of quite mature students are shown to be by their drawings in these respects.

The size of the body compared to the wings, the relative position of each to the other, the size, placing, or possible discarding of the "feelers," these are some of the vital things to be very carefully studied. Several efforts from each student are none too many to expect before a really good decorative insect can be evolved.

Nature and nature's principles are the guide, but are not to be followed in the direction of pictorial reproduction except in a first study or two. The suppression of details antagonistic to a good decorative unit is an important part of designing which is very difficult for some to understand. Especially is this so with many high school and college students whose work in biology demands exact drawings of details barren of æsthetic interest. The preparing and cutting of the stencil or wood block or the reproduction of the design in metal or other medium need not be enlarged upon here, owing to lack of space. The interest of each student should be appealed to and allowed within reasonable limits to be the guide toward the particular decorative development desired.

With adequate time, a problem of this kind should be tried by each student in its various adaptations to wood, metal, weaving, printing, carving, and other crafts.

HAROLD HAVEN BROWN
College of Education, University of Chicago.

[Copyright reserved]

HIGH SCHOOL — MECHANICAL

THE CORNICE. One of the most important features of a building is the cornice, the design of which makes or mars the appearance of the structure. In large public buildings or towering city structures, where the roof cannot be seen, the cornice becomes the crowning architectural feature. This particular subject will be discussed in later numbers of this publication. There are many ways of constructing a cornice for a frame house, the simplest being, as a rule, the best looking one. In brief, a cornice consists of the plate and studs supporting the rafters, which in turn carry the gutter with the customary outside finish. As a means of protection to the house, it is paramount that it should be well constructed and kept in perfect condition.

The connection of the rafters with the wall is about the same in all types of roofs. They are not framed into the plate but are simply spiked to it. Usually they extend out beyond the wall so as to form the eaves, and they are then cut over the plate and allowed to continue beyond. Sometimes the rafter is not extended beyond the plate, but is cut off at that point, and a separate piece is nailed against it to form the eaves as in Plates XXXIII and XXXIV. This piece does not always continue in the same line with the rafter, but may make an angle with it, so as to give a break in the roof line, as in Plate XXXIV.

Rafters are usually $2'' \times 9''$, shingles 16″ long $\frac{3}{8}''$ to $\frac{1}{2}''$ at the butt, and laid $4\frac{1}{2}''$ to $5''$ to the weather. On walls, $5''$ or $6''$ is the usual exposure. Slates are made in different sizes from $6'' \times 12''$ up to $16'' \times 24''$ laid $3''$ to the weather.

Sawed shingles come in bundles of 250, or four bundles to the thousand. In measuring for shingles the quantities are usually taken by the square, equal to 100 sq. ft., and the number of shingles required will depend upon the lap or exposure which is given to the shingles.

The covering capacity of 1000 shingles at various exposures is as follows:

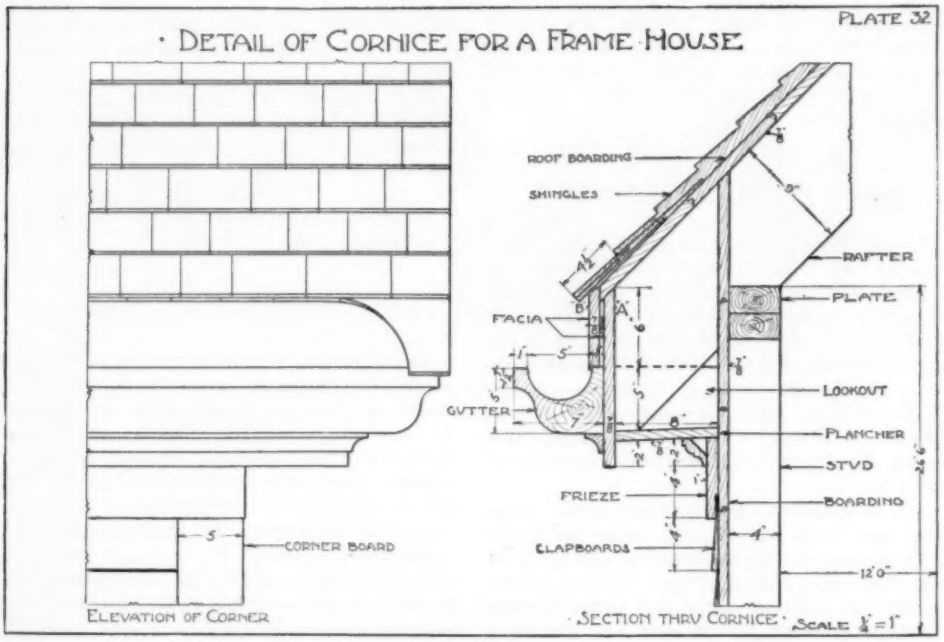


PLATE XXXII

This plate shows a simple cornice for a frame house. Draw in the following manner: stud, plate, rafter, outside boarding, facia A, gutter, facia B, plancher, frieze, clapboards, and shingles. Complete the elevation by projecting the different members. Plate 12" × 18". Scale ¼" = 1".

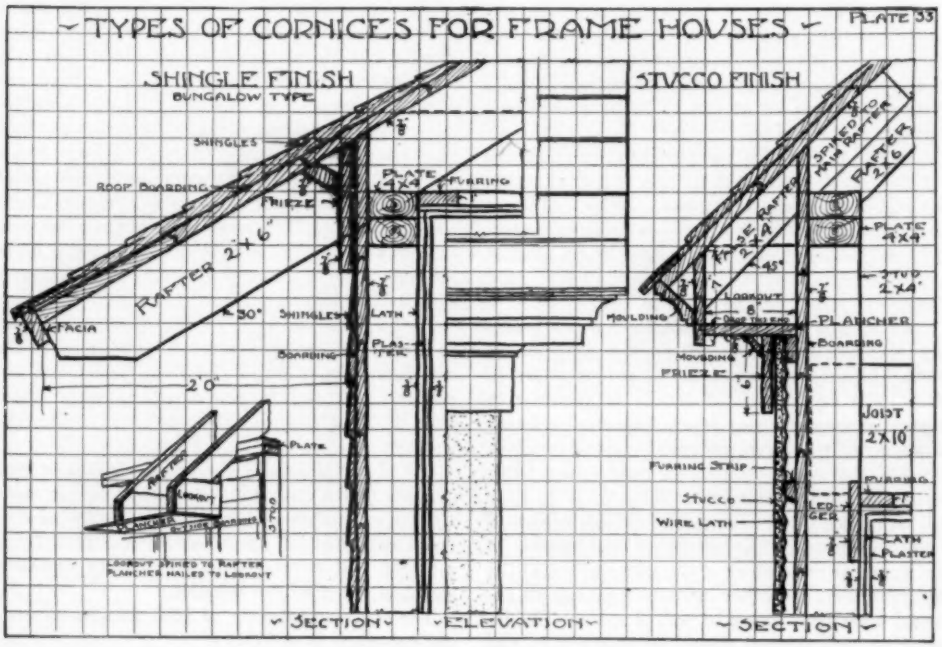


PLATE XXXIII

Draw this plate freehand on cross-sectioned paper, and make two finished drawings as in Plate XXXII.

4 inches to the weather 111 sq. ft. = 900 per square.

4½ inches to the weather 125 sq. ft. = 800 per square.

5 inches to the weather 139 sq. ft. = 720 per square.

6 inches to the weather 167 sq. ft. = 600 per square.

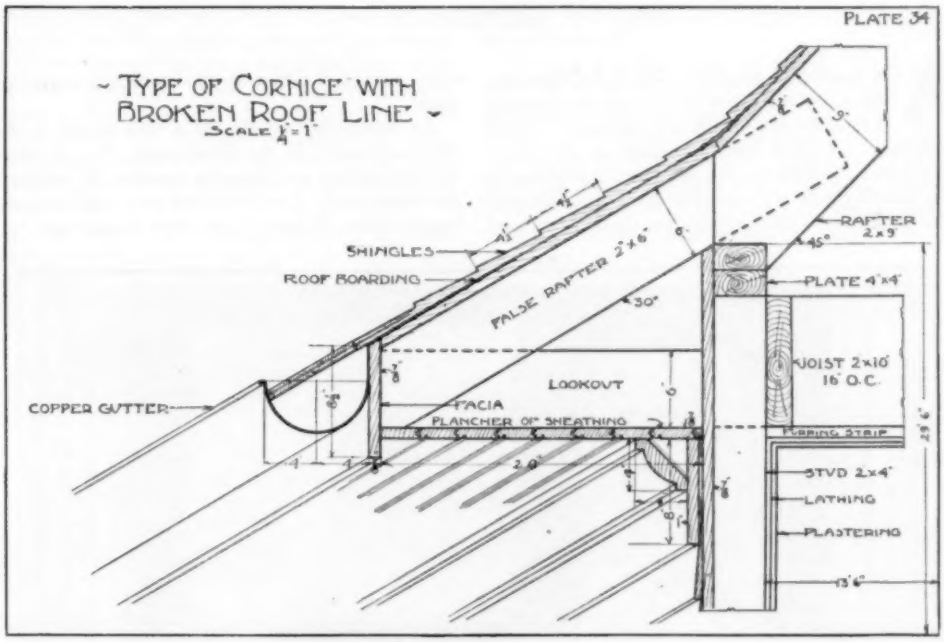


PLATE XXXIV

This plate shows the type of cornice with broken roof line and hung copper gutters.

The elevation lines are drawn at 30° downward to show the side of the house. Finish this plate as in Plate XXXII. Border line 12" × 18". Scale ¼" × 1". A model of any one of these cornices makes a valuable adjunct to a drawing-room outfit, and at the same time an excellent model for wood-working.

HARRY LE ROY JONES
Director of Manual Arts, Somerville, Mass.

Industrial and Household Arts

KNITTING I

AS a matter of manual training, knitting has value, among other considerations, because it requires the use of both hands. "Sloyd knitting," so-called, aims especially to give flexibility and strength to the left hand. Starting in the fourth grade with wooden needles of medium size and coarse knitting cotton, both boys and girls have shown an enthusiasm in learning to knit that made the results surprisingly successful.

In the beginning there must be very close supervision of individuals. It is best to start with two or three children chosen from among the best workers, adding to the group as fast as possible and letting those who have mastered the difficulties show the slower or less confident. Before long it can be work for spare minutes before school, or when assigned lessons are completed, or when the teacher is reading stories, or "honor work." The work must be examined often and the mistakes corrected either by the teacher or some apt pupil.

An interesting article for a first model is the shoe-bag shown in the illustration. No. 6 white knitting cotton and wooden needles $\frac{5}{16}$" in diameter were used. Forty stitches were cast on (care being taken to have them very loose) and two rows were knitted by the teacher. This gave the children a foundation on which to work and made it easier for the teacher to see and correct the mistakes. The children were encouraged to use nearly the whole ball of cotton, that they might have as much experience in knitting as possible. The fact that the bag was to be used for a definite purpose was not lost sight of, however, and its size was determined according to the particular shoes it was to hold. When the straight piece which was later to be folded into a bag was judged to be large enough, it was seamed off double by

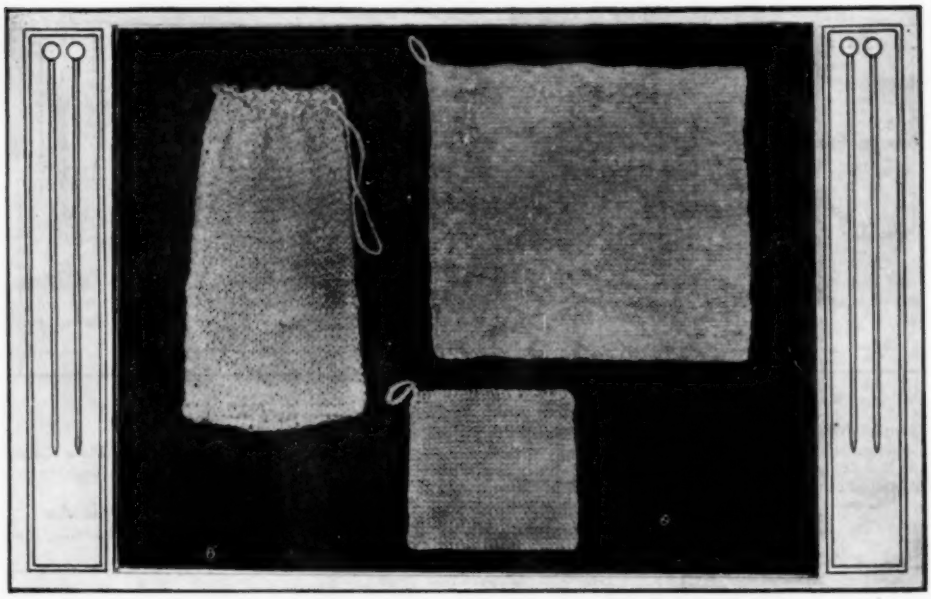


PLATE XII. A shoe-bag, a dish cloth, and a holder such as children can easily knit.

the teacher. This seaming formed the bottom of the bag and the thread was left long enough to sew the edges together up the side. The bag was completed by a drawing string crocheted either with a hook or with the fingers, and run in and out between the stitches near the top of the bag.

As the local department store could not supply all the needles we wished, some of the boys made excellent ones from stock ¼″ square, using a button mold for the end. Whittled, sandpapered and shellaced, they furnished an interesting manual-training problem. The girls made sheaths of chamois skin for the new Sloyd knives that were used.

A child who did n't succeed very well with the first knitting might try next a wash cloth made exactly like the bag but cast off without folding and finished with a crocheted loop at the corner. After a little experience in knitting, a very convenient shopping bag may be made like the shoe-bag using macramé cord, and the largest needles. In this it is better to have the piece knitted the width desired for the bag and twice the length. Make the fold at the bottom and sew or crochet the edges together at both sides. The number of stitches must be determined by the size of the bag desired and the tension of the worker. A small bag of white cord started with 15 stitches and drawn up with ribbons makes a very pretty gift.

After the first piece of knitting, teach the children to cast their stitches on and off.

The dish cloth or wash cloth shown, while being plain knitting, is more difficult than the bag because it is made with steel needles and has a larger number of stitches. Use the coarsest steel needles and knitting cotton, either No. 6, No. 8, or No. 10. Put a cork or ball of sealing wax on one end of each needle to prevent the stitches slipping off. Cast on 70 stitches and knit until the cloth is of the desired size. Finish with a crocheted loop at one corner. If desired the edges may be finished with crocheted scallops.

The holder was made by some of the children for whom the dish cloth would have been too long-continued a task. White or ecru macramé cord and No. 12 steel needles were used. Thirty stitches were cast on and it was made square.

Each child brings a box for his knitting and keeps in it a clean handkerchief to "keep his hands dry." This is especially necessary in the beginning. With learners the tendency is to hold the thread tight, and it gets moist and soiled and sticks to the needles. Encourage the children to knit at first so loosely that the stitches will slip easily along the needle and let them see how soft and pretty it looks. Such articles as the dish cloth and holder, however, should be knitted tight and firm. But whether tight or loose, always applaud an even tension.

Knitting cotton commends itself as a medium for use in schools for several reasons, not the least of which are the cost and the fact that it launders so satisfactorily.

The question may well be asked, "How long shall the boys continue to knit?" As long as it remains manual training, and the boys are interested. The attitude of the teacher and the articles made will determine this. Probably not later than the end of the fifth grade. When knitting becomes fancy work it is girls' work, and, as such, may be continued indefinitely, especially if it be combined with crocheting.

A. J. Lamphier
State Normal School, North Adams, Mass.

BOOKBINDING FOR BEGINNERS II.

We shall now begin to deal with materials that are more exclusively employed in bookbinding work. The simple articles considered at first were not books; but because the processes involved and the materials used would be used later in the more difficult work of binding a real book, they were made a part of this course.

The wise teacher will become somewhat familiar with handling the required materials before attempting to give instruction. It is recommended that two or more models from each problem be made by the teacher before selecting one for the class.

Before proceeding further some kind of a permanent holder should be provided to keep all together the various pieces of the model. This prevents the confusion and loss of time incident to passing several kinds of materials each by itself.

A Portfolio

One lesson might be used for the making of a portfolio for this purpose, cut from screenings or heavy wrapping paper, and patterned after an envelope, from 6″ × 9″ to 9″ × 12″ in size. If large pads of paper are used in the schoolroom, their cardboard backs may be utilized. Take two of the same size, punch holes along three sides of each, near the edges and lace them together. If one of the long sides of the resulting holder has been left open, materials can be removed with greater ease than if a short side is so used. A set of holders thus made is very durable. New paper bags make good holders although less desirable than either of the other two.

Materials

The materials given in this list will be used in nearly all of the problems which are to follow.

Article	Approx. size	Approx. cost
Newsboard	26″ × 38″	$1.25 per bundle
Vellum de luxe	38″ wide	.12 per yard
Eyelets	1000 in box	.25 per box

Newsboard is in reality a box board, and differs from binders' board in the quality of the fiber. But for such articles as are described in this course, it is the more satisfactory of the two. Both newsboard and binders' board are sold in bundles each weighing 50 lbs. The board is numbered according to the number of sheets in the bundle. Thus No. 60 means that the bundle contains 60 sheets. Board of this number is light in weight, easily handled by small children, and is well suited to the articles here described. Most book covers are made of No. 30 (30 sheets to the bundle), which is twice as thick as No. 60. The sheets of newsboard are rather large to be handled conveniently. If desired, they will be cut in quarters by the dealer at slight expense.

Vellum de luxe is a sized and tinted cloth of an inexpensive grade of cotton, which is quite suitable for the purposes of this course. If material of a higher grade is desired, art canvas (21¢ per yard), art vellum (17¢ per yard), etc., may be purchased. These come in a great variety of colors. It is better to use but one color in the class for economy's sake, but, if this is not to be considered, several colors may be used. Choose quiet colors such as "old blue," "dull green," "deep red."

Eyelets are here mentioned that they may be used on *A* if desired. Purchase eyelets of the same make as the eyelet punch (see list of equipment), since those of a different make are not always an exact fit.

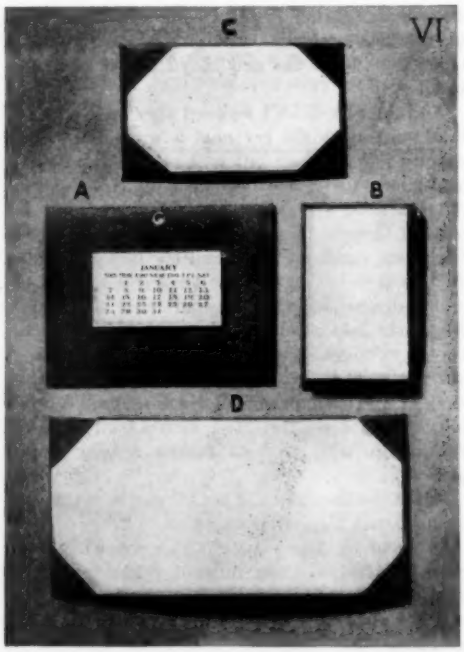
Problem II. *Mounts and Pads.* Time, 6 hours. (See Plate VI.)

This consists of a foundation of a single piece of newsboard, covered back and front with a bookbinding cloth.

A. Mount of a Calendar or Picture

First secure the article to be mounted and then determine the size and shape most desirable for the mount. Never make the mount first and then attempt to find something to fit it.

To determine the size of the mount, place the calendar or picture on a sheet of paper and find the most pleasing margins by laying a pencil on each side of the article. Increase or decrease this margin by moving the pencils back and forth until a satisfactory position is found, as shown in Fig. 7. Indicate this position by a line on each side. In the same manner, establish top and bottom margins, illustrated by Fig. 8. The margin at the top may equal that at the side, or be a trifle wider or narrower;[1] the one at the bottom may equal the side margins or be wider, but never narrower, and always greater than the top margin. Draw lines for top and bottom and the size of the foundation is indicated. A fraction of an inch may be added or subtracted to give even measurements.



Mounts and pads by children a dozen years of age.

Working drawings should now be made of the completed model, showing the location of the calendar, also of the front and back.

Make them either accurately or freehand as described in Problem I.[2] If the latter method is used, some sense of proportion should be observed. That is, do not draw 3 inches as long as 6 inches, nor 4 inches longer than 7 inches. The size of the foundation has already been determined. The front covering should be ½ inch larger on each

[1] In a vertical sheet, wider; in a horizontal sheet, narrower.

[2] See School Arts Book, May 1912.

side than the foundation, to allow for laps which are to fold onto the back of the newsboard. The back covering should be from $\frac{1}{16}$ to $\frac{1}{8}$ of an inch smaller than the foundation on each side, as the finished product looks much neater if no raw edge is visible from the front

In Fig. 9 the first drawing is of the face of the completed model showing the location of the calendar. This also shows the size of the foundation. The other two drawings show the size of the two pieces of vellum If the first drawing seems too complicated, omit the location of the calendar, and draw and dimension only the outside rectangle to give the size of the foundation.

The pieces of material given out should be a little larger than the finished size, although unnecessary waste should be avoided. No attempt should be made to cut these pieces carefully or regularly. Each pupil should be led to depend on his own initiative in the use of the rule and triangle. An irregular edge is not a guide, while straightedges and right angles are of considerable assistance.

With rule, triangle, and pencil, carefully lay out each part from the drawings already made, and cut the coverings with the scissors. The foundation is more successfully cut with the paper cutter, as to cut it with scissors is a very difficult task for little hands and likely to loosen the scissors at the joint. The most desirable way is for each pupil to cut his own newsboard, in which case the ruler fastened to the cutter may be used to insure the correct size without any preliminary measuring. If the cutter is deemed unsafe for the pupils' use, the proper size may be marked on the newsboard with pencil and the pieces cut by a large boy or by the teacher.

When the pieces have all been cut, place the newsboard on the back side of the front piece of vellum, with the margins equal, and draw around it. Cover the surface inside the pencil lines with a thin even coat of paste.

Much of the success of the work depends on the pasting and rubbing. The paste is of the right consistency when put up by the dealer, and if it dries somewhat after being opened, a little water thoroughly stirred in will make it all right. The brush well filled with paste should be passed over the surface of the covering material with long even strokes. No dry spots should be left, and especial pains should be taken to cover the surface close to the pencil lines. Look across the pasted surface toward the light to see if it is entirely covered; looking directly down upon it does not reveal the dry places. Rub the brush rather heavily over the surface to make the paste sink into the cloth.

While pasting, several sheets of newspaper are invaluable to protect the desk, the model, and the fingers. With a few quick strokes of the card-cutter, cut off the folds of a newspaper, leaving loose sheets the size of a half or quarter page. Each desk should have several sheets, placed one on top of another. When the top sheet has become sticky, discard it. A perfectly clean surface beneath it is ready to be used in the same way. Press the newsboard on the pasted surface, turn it over,[1] and rub it down very hard on the right side of the vellum. When rubbing the vellum on the right side, a small piece of cloth for each pupil prevents finger marks, removes any paste which may be on the outside, and enables the pupil to rub harder as the cloth protects the hand.

Before pasting projecting parts, the corners should be cut. Two methods are shown in the illustrations. In the first, two adjacent projections are turned onto the back of the foundation. Be careful that they fit very closely to the sides of the newsboard, press down with the fingers, and hold them very firmly. At the corner will be a surplus piece which should be pinched to stand upright. Slanting the scissors very slightly upward, cut from the corner toward the center. (See Plate 10.)

Deciding upon the right size mount for a picture by experiment with pencils.

[1] When turning over any part of the model which has a pasted surface, take hold near the center as far as possible, as handling by the edges or corners is likely to remove paste from the places where it is most needed.

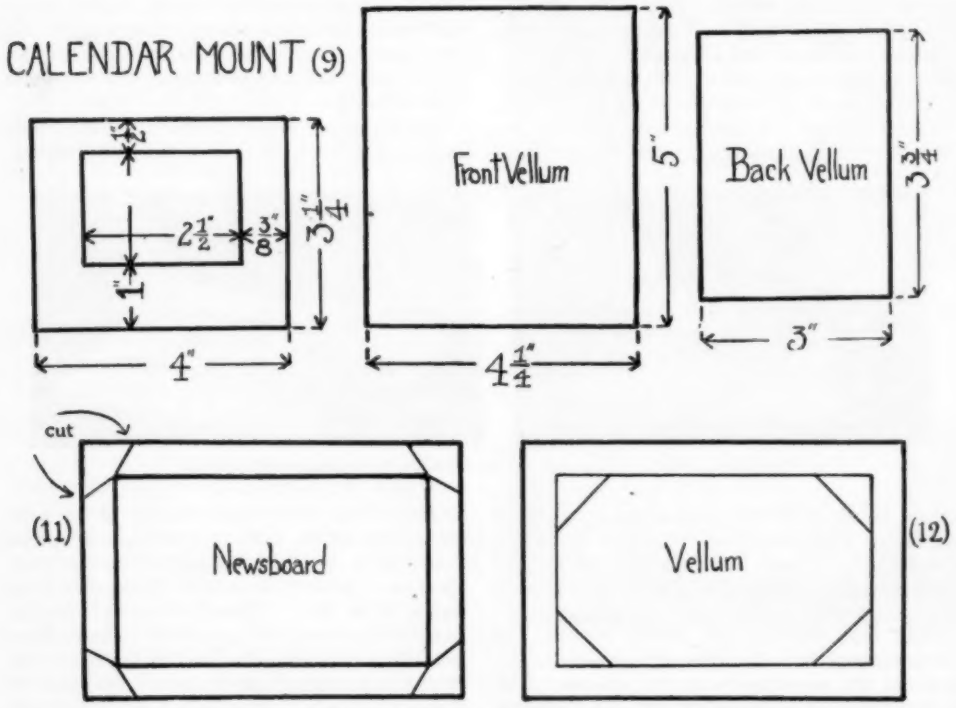
The second method is to make slanting cuts from the outside of the vellum toward the corners of the newsboard. (See Fig. 11.) Apply paste to the projecting sides, fold over and rub down; treat the ends in the same manner.

If it is desired that the completed mount shall hang on the wall, make a loop of ribbon, tape, or vellum. If tape or ribbon is used, choose the color very carefully; that which matches the vellum is the best choice; but, if a contrast is preferred, choose a soft color which has some quality in harmony with the vellum. Paste this loop to the back of the foundation, allowing it to project above the top.[1] Apply paste to the back covering and rub it down very firmly, being careful that no loose edges are left.

According to plan, paste on the calendar or picture. Dry all under a weight. If several mounts are to be placed under the same weight, it is better that each should be separated from the others by a sheet of blotting paper, or several thicknesses of newspaper. Allow them to stand over night. In the morning they will be found sufficiently pressed.

B. Mount for Memorandum Pad

Secure a small pad, and plan a mount to extend beyond the pad ⅛ inch or more on each side. Draw plans, work out, and paste as in *A*. Instead of a loop by which to suspend the pad, make a holder for a pencil to be placed on the right side of the mount. Cut a strip of vellum one-half or three-quarters the length of the mount. At each end of the strip turn onto the wrong side about ⅛ inch to give a finished edge. To secure the correct size fold the strip over the pencil to be used, and, with the pencil still folded in, paste the two long edges of the strip together, and then to the back of the newsboard, having it placed midway between the top and bottom edges. The pasting of the back covering then follows. Remove the cardboard back from the pad before pasting it to the mount. Dry under weight.



Such drawings as the children should make in preparation for their constructive work.

[1] Instead of pasting on a loop, a hole may be punched near the top with the eyelet punch, and an eyelet inserted. This should be done after the back is pasted on.

C. Pocket Memorandum Pad

This is intended to be carried in the pocket, and its size should be governed by its use. Avoid rectangles which approximate the square, but

Clipping the corners.

choose rather such proportions as 2 : 3 or 2½ : 4. As in *A*, make working drawings for the three pieces. On the drawing of the front piece indicate the location of the slits into which the corners of sheets of paper are to be inserted. (See Plate VI.) Lay out and cut all parts. On the front piece of vellum lay the newsboard as in *A*, and draw around it. From the corners measure equal distances along adjacent lines, and connect the points by straight lines, as shown in Fig. 12. Be careful not to make these slits too near the corners, ¾ of an inch to 1 inch being a good measurement for a small pad. Cut on these lines with a sharp knife, or folding the ends of the line together, cut along the line with scissors. Apply paste to the front piece, being careful not to paste outside the slanting lines at the corners, for this space should be left free to hold the sheets of paper. One way to protect these corners is to insert a piece of newsboard in the slits, from the right side of the vellum, so that the corners on the wrong side are covered. The paste may then be applied with freedom. Remove the protecting piece of newsboard and paste the vellum to the foundation. Finish as in *A* without the hanger, or, if desired, add pencil holder as in *B*. Cut several sheets of white paper ⅛ of an inch smaller than the newsboard, and, when the paste is thoroughly dry, insert them in the slits.

Pad D. Like *C* except that it should be large enough to hold a school blotter. Increase the size of the corners to be proportionate to the size of the blotter.

FLORENCE BEAN
Assistant in Manual Arts, Boston Public Schools

MISCELLANEOUS

BENT WIRE. To give boys and girls a better understanding of fine curvature, as well as skill in the use of their fingers, Miss Grace Elliott, Supervisor of Drawing, Everett, Mass., has had her pupils use copper wire as illustrated in Plate XIII, a spiral bent by George Oliver, a ninth-grade boy.

A SCHOOL CALENDAR. Do something different this year and a little more ambitious, perhaps. Make a dial calendar like that shown in Plate XIV. This is reproduced from a calendar suggested by the first chapter in that charming nature reader, "The Fall of the Year," by Prof. Dallas Lore Sharp, of Boston University. It can be made on an imperial sheet of cardboard as follows:

Locate a center on the vertical axis of the sheet 12½″ from the top. With a compass, or string and pencil, describe concentric circles of the following radii: (*a*) 1⅜″, (*b*) 2⅝″, (*c*) 3⅜″, (*d*) 5¾″, (*e*) 6½″, (*f*) 7″, (*g*) 10½″.

Between circles *b* and *c* draw the numerals for the clock face. Divide the circle *g* into as many spaces as there are days in the six months included in the calendar. The easiest way to do this is first to divide the circle into two parts by means of a vertical diameter; next to subdivide one-half tentatively into thirteen spaces, and one of these spaces into seven parts, to secure the unit required. This unit is about ⅜″ measured on circle *g*. The circle should be spaced off carefully and counted to be sure that the days are all provided for, before

PLATE XIII.

the lines are drawn from *g* to *e*. The best way to draw these radiating lines is to drive a pin through the center into a large board or into the floor, and

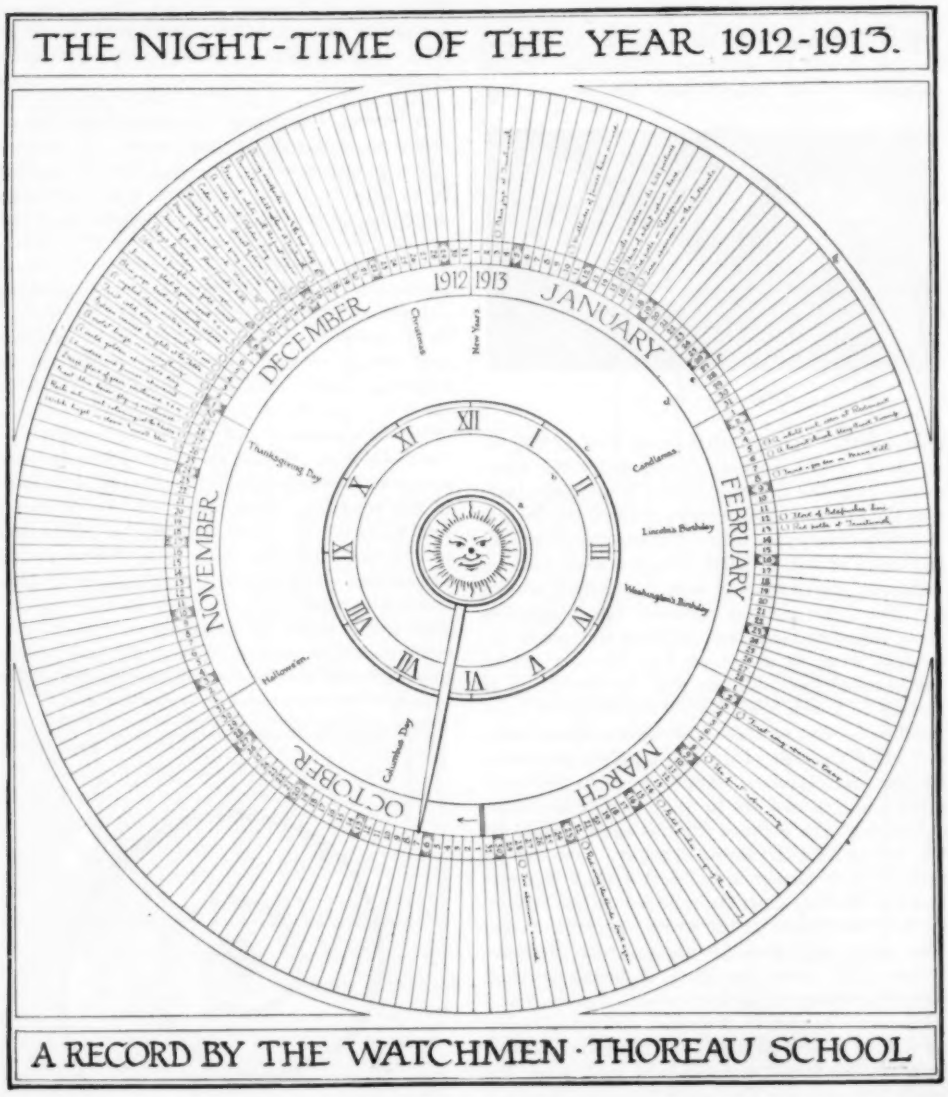


PLATE XIV. One of the two dial calendars which make up a year of time, suggested by "The Clock Strikes One," in "The Fall of the Year," by Prof. Dallas Lore Sharp of Boston University.

to rule the lines by means of a straightedge held against one side of the pin. The point that must be absolutely fixed on the vertical axis is the division between the 31st of December and the 1st of January. This should correspond with twelve o'clock on the dial. The divisions between the months and between *d* and *e* may now be easily determined, the names of the months printed in, and the numbers of the days added in order, the Sundays being emphasized either by color or by lines as shown in the plate. Between the circles *e* and *d* important days of the year, like Thanksgiving, Christmas, and Washington's Birthday, may be noted.

Upon a circle of cardboard of $1\frac{1}{8}''$ radius, draw the smiling face of the sun. From a piece of thin wood make the hand for the dial about 7″ long, with a 1″ circle for the bearing beneath the sun.

Cut a ½″ circle from cardboard for a washer to go beneath the hand, and a thin slice from a cork to go beneath the center of the chart. A tack driven through the nose of the sun, the hand, the washer, the chart, and this piece of cork will hold the central features in place, and allow for the revolution of the hand. In the space between circles *f* and *g* a record of the weather may be kept and of the observations of the children. These observations should have to do with such elements in nature as the birds, the flowers, animals, etc. The children will prize the honor of setting the hand ahead each morning, and of writing in their observations of the previous day.

If this chart is made during September and the record begins during October, it will hold their enthusiastic interest throughout the season.

Of course another chart should be made next March for the daytime of the year, high noon of which falls between June and July.

The few notes which appear in the outer rim of the dial are transcribed from a chart actually kept last season by a grammar-school pupil twelve years of age.

A COLOR SPHERE

Smoked glasses and belladonna! No wonder the Professor looked disgusted. He did not approve of co-eds anyway, and to have one report for a first lesson in experimental psychology, especially to study color, and to come blind, as it were — well! It was like a co-ed!

This co-ed was a Drawing Teacher taking a year off for study and unfortunately beginning by having her eyes tested. Her classmates proved to be a Doctor, an Author, and a Little Minister — strangers all, but each with a view-point destined to enrich the study of the rest.

For the first lesson the Professor assigned a chapter[1] describing a solid which showed the relations of the three qualities of color. This they read aloud for the benefit of the co-ed, the Professor having vanished. They re-read! They discussed! But the meaning of that solid was a mystery! How could they understand a diagram when they had only eyes with which to see it?

The Drawing Teacher's eyes were closed; she could not see the diagram; but before her mind's eye there glowed a color sphere brilliantly clear because Mr. Munsell himself had helped to make it! Could she make them see it? Should she? The co-ed in her advised "No!" The Drawing Teacher in her said, "Yes!" and won. Before they realized her three classmates had climbed with her from South Pole to North and tobogganed back on a scale of values. They had circumnavigated the globe through all the hues; they had delved deep in toward the gray center and flown far out toward that Saturn's ring we call the rainbow, studying intensities as they went.

And then they looked at the diagram in the book — no longer a mystery, but illuminated by the light of the color sphere. It was about this time that the Professor came to quiz, and remained to be quizzed — to his evident surprise, and to the secret delight of the Doctor, the Author, and the Little Minister.

As for the Drawing Teacher, it is because of that incident that she believes more firmly than ever in the color sphere. She would put one into the head of every teacher and pupil. But first she would put it into his hands and before his eyes — a concrete object on which to base the abstract idea. To this end she has made for her classes a color sphere, crude and imperfect, she very well knows, but so useful that she hopes whoever reads this will try one, too.

Materials needed for a Sphere of 8″ Diameter

For the standard: — a 10″ stick file, or a strong wire fastened into a block (Fig. 2).

For the sphere: — 6 pieces oak tag 13″ × 5″, 4 corks ¾″ diam., about ⅓ yd. thin muslin, newspaper, needle and thread, flour paste.

For the cover: — 6 pieces water-color paper 13″ × 5″, paints, glue.

Construction

Draw and cut the sections (Fig. 1) and number them 1, 2, 3, etc. Paste cloth on both sides around the holes to prevent them from tearing out.

Pierce one of the corks (Fig. 2, A) and slip it over the wire standard. String the lower ends of sections 1, 2, 3, etc., keeping the flap E (Fig. 1) always at the right. Slip cork B down to hold them in place.

Eight inches above, place cork C to prevent the top from slipping down. String the upper ends of sections 1 and 2 and see that half of flap E is inside and half out. Place cork D to hold the sections while sewing them together.

String the upper end of section 3, join it to 2, and continue until all are joined (Fig. 3).

Fill in any hollows with narrow strips of newspaper pasted on. Cut bias strips of cloth 1″ wide and paste over the ribs.

[1] A Text-book of Psychology. E. B. Titchener, p. 59 *ff*. "The Visual Qualities."

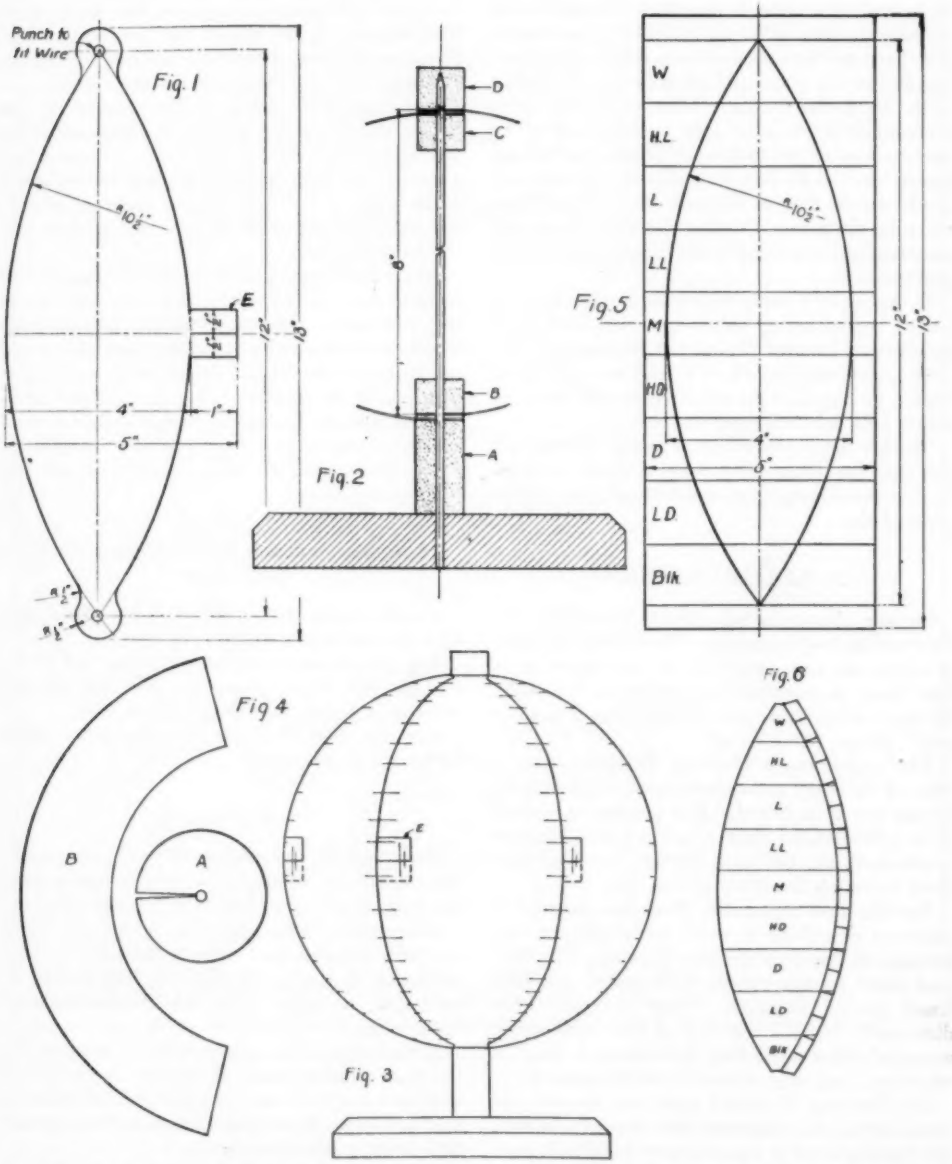


PLATE XV. 1. One section of the sphere. 2. Vertical section of standard through center. 3. Sphere ready to receive the colored cover. 4. Parts of the cloth cover. 5. One section of the colored cover. 6. A section of the colored cover cut ready for gluing.

Cut 2 circles of cloth (Fig. 4, A) to cover the frigid zones, 2 "circular capes," B, for the temperates, and a long bias strip for the torrid. Paste the upper ones, stretching the cloth smoothly over the surface and let this dry thoroughly. Then cover the rest of the sphere and hang it upside down until it dries, because the paste softens the cardboard and the weight of the upper part would cause the lower to sink and make a dent at the South Pole.

The sphere is now ready for its cover and is surprisingly firm and strong. Draw, but do not cut, the sections and divide each into as many horizontal parts as desired. In the illustration (Fig. 5) nine values are shown with the names generally used. The painting will be easier if the paper is stretched. Use flat washes and begin with the H. L. value, covering all the surface below W. The six standard colors must be scaled, agreeing in value at every step and each graded without change in hue. This is the hardest part!

When all are ready, cut the sections as in Fig. 6, and crease the flaps back. Glue the first piece at top, bottom, and flap edge, and the rest at both edges, being careful to join the values accurately. This, strange to say, is the easiest part! When it is completed, paint the North Pole white and the South Pole black — and lo! the sphere is done.

To teach color with such a model is a delight, and to hear the children argue and plead for the privilege of carrying it upstairs is music. Try it and see!

JEAN KIMBER
Teacher of Drawing, Girls' High School, Atlanta, Ga.

JUST HOW TO DO IT

"I am not looking for any more *ideas;* but I would like to learn how to execute *well* some of those I have." — *A Grade Teacher.*

By George William Eggers

A WATER-COLOR WASH

THE power of flowing a reasonably clear, flat, even wash of color is essential to all water-color work, being absolutely necessary in decorative work, and fundamental to the freer methods sometimes used in pictorial expression. Flowing a wash is the great bugbear of amateurs and even of some professional illustrators, and yet it is as definite a matter of cause and effect as "two times two equals four," and is as easy of accomplishment as that problem in arithmetic.

Conditions of Flowing a Wash

Paper. Some papers will take water color more readily than others. *Some papers absorb* moisture to such a degree that the moment the water color touches them a stain is made in them. Such papers will not take wash. You cannot flow a wash on dry blotting-paper. The thing that makes it a good blotting-paper makes it a bad water-color paper. We sometimes find when flowing a wash upon even a fairly good water-color paper that some spot on which the eraser has been used dries darker than the rest of the paper. This is because the eraser raises and loosens the fibers and they take in more color than the rest of the paper does.

Some papers resist moisture, and these, too, are unsatisfactory papers for water color. Water color is partially a stain: the color must, to some degree, go into and unite with the substance of the paper. Any glazed or calendared paper has its fibers already filled with a starch-like material: there is no room for color particles and so the color slips off.

Between these two extremes lie the available water-color papers. The Whatman papers are doubtless among those best known to us. They tend to be somewhat firmer and harder than the average. These papers are apt to work best after they have been moistened with clear water. *When we moisten a paper,* the water works its way in between the fibers and spreads them apart. When the paper dries the fibers have more or less tendency to remain apart, leaving the paper more absorbent than it was. In some papers this tendency of the fibers to remain apart is more pronounced than in others. Accordingly some of these papers are best for water color when quite dry, and others, when still somewhat moist.

Among papers which do not require moistening the heavier weight of the ordinary manila practice paper has an excellent surface for taking washes. It is apt in time, however, to become brittle in substance and darker in color. The manila wrapping-paper is a "filled" paper, and, of course impossible for water color. Many of the *cover-papers* and construction papers take water color well without moistening. The "German white" drawing paper used in schools is less sympathetic in texture than manila, but gives clean beautiful tones. Illustration board of several makes is a charming material for flat wash work; Steinbach board or paper has a surface so hard that it will stand all manner of scrubbing and erasing without injury, but it takes wash indifferently.

An ideal water-color paper is one that drinks in the color until the color seems to become a part of the paper itself, but drinks it in slowly enough so that the wash may progress uninterruptedly across its surface.

Brushes. This work, like all art work, should be done in the broadest, simplest manner possible. Of course, if the space to be filled by the wash is intricate in shape and many-pointed, a large brush is impossible. Otherwise, one might almost say, the larger the brush the better. For schoolroom use, a round sable or imitation sable brush about the diameter of a lead pencil is pretty satisfactory. This should be kept scrupulously clean and in good form.

A brush can be tested in this way: Dip the brush

into a vessel of water to a third of the way up the ferrule. Move it about in the water for a few minutes. Then, holding the brush by the tip of the handle, fling the water out of the end of the hairs by flipping the brush sharply. As the water leaves the point of the brush it draws the hairs together. They should then remain so, giving a perfect single point to the brush. There should be no extra, long hairs at the point, and there should be no hairs standing out from the rest of the brush. Any such are broken ones, and could only have become broken by being bent sharply across the edge of the tin ferrule. If the brush has ever been subjected to such treatment, the chances are that it has been injured in other ways. In buying brushes insist upon being allowed to try the flipping experiment with any you select. Most brush counters are provided with a tumbler of water for the purpose. Japanese brushes sometimes come to us filled with a starchy material. This protects the hairs from injury in shipment. Remove this by tapping the hairs very gently all the way around (not on the point, of course!). The paste quickly breaks up and may then be dusted out. It can also be removed by soaking. Clean the brush well before using.

A brush is a delicate instrument. The bristles or hairs are held in place usually by a glue or gum. *Do not allow your brush to remain in water more than necessary. Do not allow the top of the tin ferrule to be under water,* for this permits the water to run down inside and soften the glue. *Do not use very warm water for cleaning your brush. Do not rub the hairs of your brush the wrong way:* the hairs will stand a good deal if rubbed the right way, that is, from the handle downward, but will stand very little if pressed against the ferrule. A good water-color brush should last for years.

Cost of brushes. Brushes just a little smaller in diameter than a lead pencil and perfectly adapted to school use may be purchased for ten cents apiece, or about seven cents at wholesale. Some brushes of about this size retail at five cents, but they are apt to be of quite inferior quality. Real sable brushes of this size may cost fifty cents or more.

Pigments. Many good three-color water-color boxes are now on the market at prices ranging from fifteen to twenty-five cents. *A good three-color box will do almost everything.* The subject of pigments and useful pigment tests will be taken up in this series at a future time. A good water-color paint should be clear, brilliant, easily softened, and smooth in texture.

Given good paper, good brushes, and good paints the flowing of a wash should be no difficult matter. A large part of the struggle in learning this, as in learning some other things, is the useless struggle with unfit material. With increasing skill the student will find himself less and less baffled even by materials below the average if he has to use them.

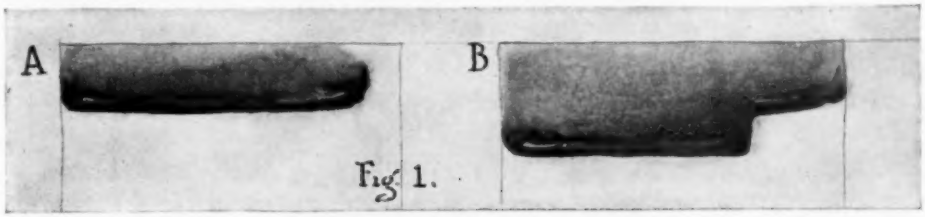


FIG. 1. A. How it appears when the first stroke is partly completed. Note the roll of water collected at the lower edge. B. How it appears when the second stroke is partly completed. Note how the roll of water is flowing down and how the two strokes blend into one.

In addition to good materials there are three further conditions to flowing a successful wash:

1. *Have plenty of color mixed.*
2. *Have your paper on a slant.*
3. *Make no attempt to correct faults.*

Along with these, perhaps the more general principle should be included, "Keep up your nerve."

Have plenty of color mixed. It is an artist's principle and a workman's principle to see the whole in some way before beginning any piece of work. (1) The shape and exact outline of the spot to be covered by the wash should be known, perhaps drawn, but certainly known at the start. (2) Enough color should be on hand to cover the spot *and more.* There is one water-color painter who says, "Have three times as much color mixed as you will need; then, if you are lucky, you may have enough." We are apt to mix too little color. If we stop in the midst of a wash to mix more, the color on the paper will dry in and leave an edge most difficult to get rid of, besides which, nine times out of ten, we cannot match the original color.

Have the paper on a slant. Sometimes a small wash is flowed on a horizontal plane; a large one cannot be. With our brush we can take care of only one direction, namely, the breadth of our wash. We have to let the attraction of gravitation take care of its height.

Make no attempt to correct. Because: (1) More than half the defects that appear in a wet wash disappear in the drying if left alone. (2) About half of the remainder can only be taken care of dry — that is, by means of the eraser or the knife-blade. (3) If we touch a spot with water color before the paper is thoroughly dry, our water color spreads and makes a spot larger, deeper, uglier, and more hopeless than the original.

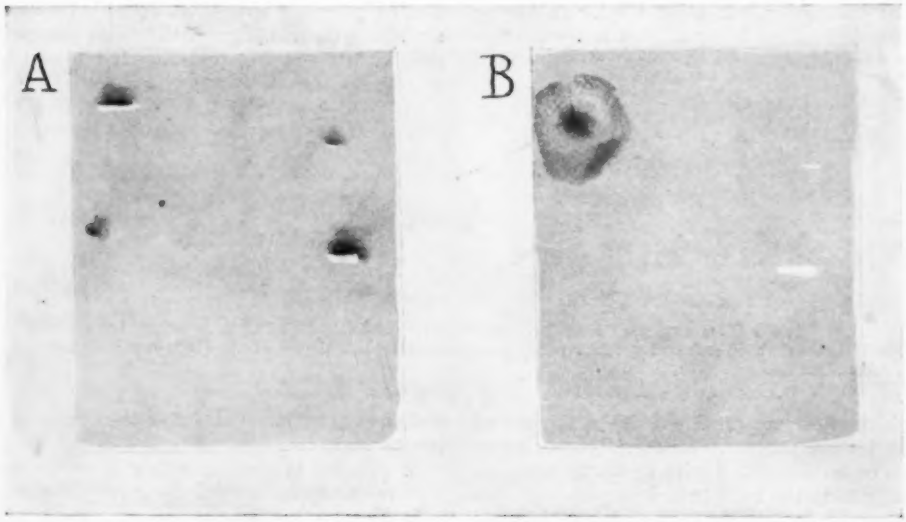


FIG. 2. A. The defects are very terrifying while wet. B. The defect in the upper left corner was corrected too soon. The other three were not touched.

THE OPERATION ITSELF

It is well to have your first experience in flowing a wash with a shape of simple form (such as a rectangle). Having studied the spot which the wash is to cover so as to know its peculiarities by heart, having ascertained the exact quality of the paper by experimenting on a waste piece, having mixed the color in sufficient quantity, and having placed the drawing board upon a slant but in such a way that its inclination can be increased or decreased as may prove necessary: (1) *Fill the brush full of color* (but not quite to dripping). (2) *Carry a slow full stroke of color across the top-most portion of the space to be covered,* living up to your outline absolutely and painting as broad a stroke as possible. This may be three-eighths to half an inch in width. As soon as the stroke is laid, the excess water color on the surface of the paper rushes to the lower edge of the stroke and lies there in a sort of roll or wave. (3) *Lift the brush, and now starting again, just below the starting-point of the first stroke, slowly paint a second,* touching or slightly overlapping the first. The roll of water color now slips to the bottom of the second stroke, and if the paper is the right paper for the purpose the two strokes have become one, twice as wide as the first and without a trace of a joint between them. This process may be continued as long as there is a roll of water color to carry down. (4) *Before this is quite used up, however, replenish the brush:* in this way the process can go on indefinitely.

If you have too much water on the brush this time, and the roll of water color upon the paper becomes dangerously large, simply slant your board a little less — then the roll won't try so hard to get over the lower edge of the stroke. If it should happen to start, a bit of clean white blotter would be of great service in stopping it.

If you have waited so that the latest stroke seems almost dry before replenishing your brush, tilt the board up so that it stands almost vertically. If there is any water there at all it will come to the lower edge of the stroke. Then, with the

brush refilled (but not too full at first), go on as before.

If you have at some point failed to make one of the strokes connect with the one above, don't touch it! Wait until the wash is dry, and then see how it looks. The greatest masters of water color leave little spots of the untouched paper here and there in ways that add great beauty to the work — even

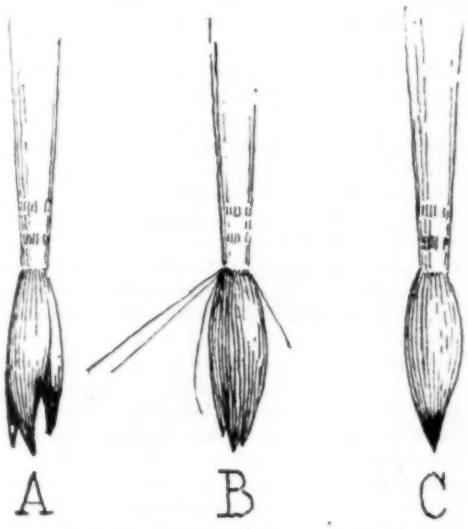


FIG. 3. A and B. Damaged brushes. C. A sound brush.

as a Sargent or a Hals leaves the mark of his brush as one of the charms of his work in oil. If the spot is objectionable when dry, it can be retouched easily enough.

If you find an unaccountable dark spot, due perhaps to an erasure or a defect in the paper, this can be corrected, if at all, by the use of an eraser or blade after the wash is thoroughly dry.

When you reach the end of your wash, one of two things may happen. Either you have planned ahead so that all the color on the brush and the excess color on the surface of the paper is used up, or else you have the roll to take care of at the bottom of the wash. If the latter, it can be managed in this way: (1) Let the board down so that the accumulating water is in no danger of running over the outline. (2) Squeeze the color out of the brush by drawing the brush between the fingers. (3) Let the tips of the dry hairs of the brush touch the roll of water. The water will run into the brush. If this does not take care of all the water, repeat. *Do not leave water at the lower edge of the wash.* It is apt to back up and form a line across the wash. Do not lay the board flat too soon after completing the wash. *Watch it until certain that the free water is all taken care of.*

Washing over a wash. This is done in exactly the same way as the initial wash. Great care must of course be taken to use the brush lightly, so as not to lift the under wash. It is possible to flow a wash without letting the brush touch the paper, provided sufficient water is used. In washing over a wash care must also be taken not to touch a spot a second time — do not overlay strokes, for instance.

Lightening a wash. (1) After the wash is thoroughly dry (so that it will lift uniformly) carefully flow a wash of clear water over it, and extending, if possible, beyond the edges of the wash to be lightened. Allow this to remain for a moment. (2) Cover with a clean white blotter. Use some pressure. (3) Lift the blotter. (4) Repeat if necessary. This does not entirely remove pigment but greatly lightens it in most cases.

Graded washes. Our directions so far have covered the flat wash only. A graded wash is managed in quite a similar way, the difference being chiefly in the color prepared. The two extremities of the gradation should be mixed separately before the wash is commenced. They are then applied as needed, using one brush or two brushes according as the contrast is to be subdued or abrupt and strong. Individual judgment will have to govern the blending of the colors. This will of course be accomplished by dipping the brush into the *two* colors when the right time comes. The quantity of each on the brush can soon be brought under control. Of course practice in all these processes will develop short-cuts: the short-cut, however, is based upon principle quite as much as the longer way, and the mastery of the principle is fundamental.

THE LATEST ART-CRAFT BOOKS

*Training of the Memory in Art. By Lecoq de Boisbandrau. Translated by L. D. Luard. 186 pp. 5½ × 9. 12 plates. Macmillan Company. $2.00.

The author of this book, born in Paris, a pupil of the École des Beaux-Arts, and an exhibitor at the Salon until 1844, gave up his career as a master for that of a teacher. Among his pupils, whose fame has become international, were Cazin, Fantin-Latour, Legras, L'Hermitte, Tissot, Roty, Dalon, and Rodin. Boisbandrau was a morning star of modernism in art-education. Nature, the living model, in action, out of doors, under sunshine, caught alive by the artist, — such were his articles of faith. To these were added a faith in the potency of a trained memory for form and color, and in the value of a disciplined hand. Here are some of his sentences: "Memory is stored observation. . . . The draughtsman must draw and redraw his model upon paper or mentally as often as he finds it necessary to enable him to reproduce the object from recollection. . . . The natural gifts of color and form memory are two faculties absolutely distinct. . . . Memory of color is the absolute condition of the existence of painting. . . . The habit of observation should make it possible to work from living drapery [drapery in action]. . . . Art is the interpretation of Nature through human feeling and human genius. . . . The exclusive admiration for old work is an obstacle so difficult to overcome that in ornamentation our age [1825–1875] runs the risk of leaving no trace of its existence. . . . Art is essentially individual. . . . All teaching based on reason and good sense must aim to keep the artist's individual feeling pure and unspoiled, to cultivate it, and bring it to perfection." His advice to the modern teacher, gathered from his "Letters to a Young Professor," would run somewhat as follows: Follow an orderly plan; watch the scribbles of children; let the work be influenced by the season; study nature; train the memory; do not begin the study of details too early; do not study masterpieces too soon.

The plates exhibit extraordinary feats of memory in drawing from nature and from the old masters. Among them are drawings by L'Hermitte and Cazin.

*Practical Hints for Art Students. By Charles A. Lasar. 214 pp. 4 × 7. Illustrated. Duffield & Company. $1.00.

This book, an outgrowth of long experience in teaching as well as of practice in painting, is a book of receipts and observations expressed off-hand. They are grouped loosely under such captions as Drawing, Composition, Color, etc. A few sentences at random will give the flavor of the whole: "Power in art may be compared to the power of woman; it does not consist in force, but in charm. . . . Art is like pepper and salt, you only want to suspect it. . . . Don't try too hard — be calm! . . . Throw your curb-bits overboard and work with excitement. . . . Good work is not guesswork or accident. . . . Keep a tight eye on things so you don't get them freaky. . . . It is the intense liking for a scene that makes it art. . . . Have as little apparent but as much suspected knowledge in a picture as possible. . . . Don't be afraid, all the great things in the world came out of faults." While the book deals primarily with the work of art students it contains much of use to art teachers in elementary schools and especially in high schools.

Mr. Lasar was born in Johnstown, Pa. He was a pupil of Gérôme at the École des Beaux-Arts, and is one of the most successful art teachers in Paris.

*The Montessori Method. By Maria Montessori. Translated by Anne E. George. 378 pp. 5 × 8. Illustrated. Frederick A. Stokes Co. $1.90 postpaid.

In the Introduction to this eagerly anticipated book, Prof. Henry W. Holmes of Harvard University says: "The Montessori system presents these main points of interest: It carries out far more radically the principle of unrestricted liberty; its materials are intended for the direct and formal training of the senses; it includes apparatus designed to aid in the purely physical development of the children; its social training is carried out mainly by means of present and actual social activities; and it affords direct preparation for the school arts." Four chapters at least of this book every teacher of drawing and handicraft should read, Chapters X to XIV. These deal with

Nature in Education, Manual Labor, and the Education of the Senses. The manufacture by the children of their own building material as here advocated is possible, almost always, in wood, and frequently in clay. In fact, much of the material used by Dr. Montessori could easily be produced for the younger children by the children of the upper grades, to the advantage of all concerned. The book as a whole presents "a pedagogical method informed by the high concept of Immanuel Kant: 'Perfect art returns to nature.'"

*Wood and Forest. By William Noyes. 310 pp. 6 × 9. 475 illustrations. The Manual Arts Press. $3.00.

To discover a book with a well-defined purpose, intelligently worked out, and adequately embodied, affords rare satisfaction. Such a book is this admirable volume. Among the topics are the structure of wood, its properties, the principal species of American woods, and their distribution. The Forest Organism is the title of one fascinating chapter. The natural enemies of the forest, the exhaustion of the forest and the uses of the forest are other topics treated concisely but most helpfully. The author's love of the out-door world, his experience as a teacher, his good sense as a scholar, his skill as a craftsman, and his wisdom in selecting a wife (!) have conspired to produce a book of such excellence that it will become at once a standard authority in its field.

The Fall of the Year. By Dallas Lore Sharp. 126 pp. 5 × 7½. Illustrated by Robert Bruce Horsfall. Houghton, Mifflin Company. 60 cents net.

To entertain children with wonder stories, a seductive and somewhat difficult task, is not so commendable nor so exacting as to fascinate children with the facts of life. This larger task has been achieved brilliantly by Dallas Lore Sharp in his Nature Series, of which this volume is the first to appear. His observations are clear-eyed, his love of this wonderful world, intense though it be, does not befuddle his common sense. His conclusions are reasonable. Moreover, his sincere delight in everything shines through his words. He is irresistible. When he says, Lie on the grass and listen to the underworld, or Come out to-night and see what happens after dark, or Listen to my experience with two eagles, or, Let 's go leafing! everybody has to; everybody wants to! And afterwards everybody remembers all about it. When he tells of things to see this fall, things to do this fall, or things to hear this fall, everybody begins at once to see and do and hear things with the utmost satisfaction. Country children and city children turn out with equal enthusiasm to follow this best-of-all pipers to Mullein Hill, or to City Hall Yard, or wherever he pleases to lead them. The outside of anything will open at his command, and the children enter, not to be lost, but to come out wiser and happier forevermore.

Two other books in this series, "Winter" and "The Spring of the Year," will be reviewed in the November number of the School Arts Magazine.

*Principles of Advertising Arrangement. By Frank Alvah Parsons. 150 pp. 6 × 9. Profusely illustrated. The Prang Company. $2.00.

The Advertising Men's League of New York City invited Mr. Parsons, President and Director of the New York School of Fine and Applied Art, to deliver a course of lectures for its members upon Art in Advertising. The course proved of such practical value to advertising men that not only was Mr. Parsons invited to repeat the lectures in New York the next season, but elsewhere, and to put them into permanent form. This unique book is the result. It is of direct value to every teacher of design. The illustrations alone, selected with a view to teaching objectively by contrasts, are invaluable as an aid in all such problems as class posters, announcements, school monthlies or annuals, and all other forms of design involving lettering and decorative detail. The text smacks of Mr. Parsons himself. It is good-natured, enthusiastic, unconventional, and forceful, the work of a man of conviction and fearless action. The make-up of the book is unusual. It exemplifies its own creed! The first edition will be nearly exhausted by orders in advance.

*The Printer's Dictionary of Technical Terms. By A. A. Stewart. 368 pp. 4 × 6½. Published by The School of Printing, North End Union, Boston. $2.00.

The author of this book, who has acquired an international reputation as instructor in this well-managed school, has sifted all the literature of this kind in the sieve of practical experience, and embodied herein the resultant best. The volume has been in preparation for several years and is the work of the pupils of the school. It is the foundation volume for a printer's library, and for the technical library of every school department of printing.

Bird Children. By Elizabeth Gordon. With illustrations by M. T. Ross. 100 pp. 6 × 9. Illustrated in full color. P. F. Volland & Co.

The Bird Children are the little playmates of the Flower Children. (See April number.) The

book might be called a masque in which children appear in the plumage of birds. Clever verses accompany the pictures. Behind the playful spirit of the book lurks a serious purpose, — to make children and birds better friends, that there may be a generation of men and women who shall more heartily love and protect our invaluable friends, the wild birds.

CHILDREN'S CLASSICS IN DRAMATIC FORM. Book V. By Augusta Stevenson. Illustrated by Clara E. Atwood. 326 pp. 5 × 7½. Houghton, Mifflin & Company. 60 cents.

Nathan Hall, The Maid of Orleans, The Necklace (De Maupassant), A Christmas Carol (Dickens), Jean Valjean (Hugo), The Black Pearl (Sardou), Ivanhoe (Scott), A Son of the Yemassee (Simms), Evangeline (Longfellow), The Treason of Benedict Arnold, and The Man without a Country (Hale), are included in this volume. The illustrations by Miss Atwood, clear and well drawn with the pen, are twelve in number.

AN ARCHITECT'S SKETCH BOOK. By Robert S. Peabody. Essays descriptive of vacation journeys amid the architecture of other countries, and on subjects relative to architecture. Illustrated by the author. Houghton, Mifflin & Co. $5.00 net.

ONE HUNDRED MASTERPIECES. By John La Farge. The greatest masterpieces of painting are here reproduced and described. Doubleday, Page & Co. $5.00 net.

WOOD SCULPTURE. By Alfred Maskell. This consideration of figure and relief work in wood is an addition to "The Connoisseur's Library." Illustrated. G. P. Putnam's Sons. $7.50 net.

MASTERPIECES IN COLOR SERIES. New volumes: Meissonier and Puvis de Chavannes. The most characteristic work of each painter is here presented and described. Each volume contains eight illustrations in color. F. A. Stokes Co. Per volume, 65 cents net.

THE INFORMATION WINDOW

ASK HERE. THE MAN INSIDE WILL TELL YOU WHAT YOU WANT TO KNOW OR HE WILL FIND OUT FOR YOU

THIS Department has been established at the request of some of our subscribers of long standing. It is the Department of Correspondence somewhat enlarged. Questions from the readers of the SCHOOL ARTS MAGAZINE will be welcomed, will receive thoughtful attention, and will be answered here or privately, as seems best. But in addition unsolicited information will be handed out here, for the benefit of our readers. It will usually be in the form of quotations from letters to the Publishers, or to the Editor, information too good to keep. We would be glad to hear from anybody who "wants to know," and also from anybody who has found out anything likely to be helpful to anybody else.

WATERVLIET, N. Y., 1912.

DEAR MR. EDITOR:

When a squeezed-dry teacher asks you sometime how to interest tired children in those everlasting color scales, recall this:

One day, during my first year of teaching, I entered the class room, and found that each child had constructed nine circles in a row. Every child in the room looked weary, as if tired of it all.

I asked one of the children, a little lad who had lived most of his life in the South, to tell me the meaning of the word "plantation." This he was able to do well. He gave me a really good description of a southern plantation.

Then I began my story, and told the children that we would pretend we were visiting a plantation of which Mr. White was the owner, so, opposite circle 1, we printed his name in bold letters. He took us to the mansion on the hill, and we saw his little baby daughter and her sister. The baby's cheek was such a delicate color that we called her "High Light." We mixed this tint and applied it to the second circle.

High Light's sister's face flushed when we asked her name. She hung her head, and answered in such a low tone that we hardly caught the word "Light." Just then, a young girl who was visiting there, came from the garden: her cheeks wore a ruddy glow. She was Miss "Low Light."

The mother of this interesting family was most beautiful of all. We called her such names as: "Normal," "Middle Tone," or "Standard Color." "High Dark" had been horseback riding, and was sunburned and tanned, so when we mixed the color for his face, it had some black with the red.

The young Superintendent of the estate seemed quite agreeable and we all liked him. He apologized for his appearance. You see he had been very much exposed to the weather and was "Dark." Old Mammy Sue (the girls said she was such a "dear") — only a bit of color showed as the blood rushed under her dark skin; and old Uncle Ned, bless his heart, no one could be darker than he, the fact is: he is *Black*.

I wove the story in slowly, as we painted the different tones from white to black, and then, later in the year, branched out to other colors than red.

If this will help other teachers, and other tired little brains, you are welcome to it.

LAURENA C. SKINNER.

HARRISBURG, PA., March 5, 1912.

MY DEAR MR. BAILEY:

Recently, we have experimented in our eighth and ninth grades with making initial and monogram stamps for marking the drawing sheets.

Some of the results seem to me to be so especially nice that I am sending you samples.

I took ten or fifteen minutes of the lesson period to talk of trademarks and stamps of local persons

and firms, of how an artist marks his work, of the old-time signet ring and cartouche. A gentleman known to many of the children has recently returned from a round-the-world trip. While in China, it was necessary for him to sign some legal papers. His American signature would not be accepted, so his name was translated into Chinese characters, carved on ivory and with that the papers were signed. Some of the children have seen this die, so readily understood what I wished them to manufacture. The remainder of the period we experimented with combining initials, and then reversing them to be ready for the cutting.

They experimented with many things — erasers of various degrees of softness and hardness. Of course the softest ones were easiest to cut, but they broke and chipped so easily that we could not use them. Pieces of flat rubber, such as is used for washers, was furnished in one room by the plumber's son. Rubber corks and linoleum were nice to use and lasted well.

Many of the boys whittled handles, to which the dies were glued or tacked with tiny wire nails.

I spent but one lesson on this — the real work was required to be done outside school hours.

Many of the children, not satisfied with one, and having the monogram fever badly for a while, made two, three, and four of different sizes and designs.

Sincerely,
MARY H. HOGAN.

UNION, N. Y., May 1, 1912.

DEAR MR. EDITOR:

Is there any rhyme or reason governing the arrangement of a fellow's initials when he tries to put them into a monogram? If there is, do tell

Yours,
CHARLES R. BEEMAN.

Yes. The general rule is that the letters read in order from left to right; or from the top downward; or from smallest to largest; or tallest first, broadest last, and the third, the middle letter, neither tallest nor broadest. In other words, when the *order* of letters is not normal, *the most important letter* is to be dominant in the monogram.

H. T. B.

MY DEAR MR. BAILEY:

We have a man who is selling quite a lot of goods to the stores that sell the unusual things. It has occurred to us that perhaps you may know of some people who are making things different from the ordinary goods seen in the stores, but who lack distribution for their sales.

If you do know of such people, it may be of mutual advantage if you can bring us together.

Yours very truly,
The Berkeley Press,
IRVING K. ANNABLE.

LEIPZIG-GOHLIS, BLUMENSTR. 22, 1. (I), April, 1912.

TO THE EDITOR OF THE SCHOOL ARTS MAGAZINE:

I shall be pleased to greet you and your American colleagues at Dresden and Leipzig. I am enclosing a list of what ought to be seen.

I have also given a list of ex libris societies, which are known to me. I did not receive the Washington's ex libris society address. It might be possible to hear of it through the SCHOOL ARTS MAGAZINE.

I am about to publish a yearbook for designers. If you could assist in securing information concerning the American designers' associations, I should be much obliged to you.

Very truly yours,
E. H. FRIEDRICH.

NOTE. Please send information as to the Secretary of the Ex Libris Society of Washington, D. C., and of any organizations of designers that would like to be represented, direct to Herr Eugen H. Friedrich. H. T. B.

THE SCHOOL ARTS GUILD

I will try to make *this* piece of work my best

MAY CONTEST

AWARDS

FOR THE BEST MAY BASKETS AND WORK RELATIVE TO MEMORIAL DAY

FIRST PRIZE: Milton Bradley Co. Set B. German Silver Drawing Instruments, and the Badge with Silver Decoration.

Irene Beesley, VIII, Calumet, Mich.

SECOND PRIZE: Milton Bradley Co. High School Box of Water Colors, and the Badge of the Guild.

Hazel Culliane, III, 9 Gould St., Reading, Mass.
Alice Edwards, II, Swett School, Oakland, Cal.
Victor Ericson, VIII, Calumet, Mich.
Ellis Hall, VIII, Hinsdale, N. H.
Emma Manke, II, Florence, Wis.

THIRD PRIZE: Miniature Masterpiece in Frame, and the Badge of the Guild.

Agnes Budzack, II, Florence, Wis.
Sidney Cheyney, II, Swett School, Oakland, Cal.
Evelyn Cornish, IV, Milford, N. Y.
Ingeborg Laaby, Hinsdale, N. H.
Gordon Martin, VII, Hinsdale, N. H.
William Powers, Hinsdale, N. H.
Marion Struthers, II, Swett School, Oakland, Cal.
Clarence Thomas, IV, Lowell St. School, Reading, Mass.
Marion Watson, V, Hinsdale, N. H.
Harry Weiner, 111 N. Main St., Bristol, Conn.

FOURTH PRIZE: Badge of the Guild.

Dion Burke, Reading
Richard Cromwell, Reading
Sylvia Fernstad, Florence
Isobel Fisher, Laurium
Jean Gray, Hinsdale
Effie McNeil, Reading
Ora Phillips, Laurium
Ellen Sorsen, Laurium
Ida Weita, Laurium

Honorable Mention: Recognition Card

Arthur Butler, Hinsdale
Dominick Deyoannes, Laurium
Mary Doucette, Reading
Bernice Fuller, Hinsdale
John Geary, Reading
Winfield S. Hancock, Hinsdale
John H. Hull, Bristol
Edwin Johnson, Florence
Oscar Johnson, Florence
William Judwich, Calumet
*Waino Juntunen, Calumet
Ruth Langille, Hinsdale
Gertrude Link, Laurium
Elsie Loaby, Hinsdale

Marie Martin, Hinsdale
Edmund L. McGlenn, Elmira
Edgert Nelson, Laurium
Evelyn Oman, Oakland
Ward Osteyee, Hinsdale
Theodore R. Silva, Provincetown
Leonard Town, Hinsdale
Ellen J. Watson, Hinsdale

SPECIAL PRIZE: Badge of the Guild.

Stanhope Brigham, Randolph
Arnold Emch, Urbana
Virginia Emerson, Randolph
Nellie Ernest, Urbana
Avery Goddard, Waterford
Kenneth Hermann, Melrose
Mearl Rourke, West Haven
Glen Shaffer, Urbana
Worthington Strong, West Haven
John Taylor, Hartford
Helen Tolonen, Laurium
Avis Woody, Urbana

SPECIAL MENTION: Recognition Card.

Florence Barnes, West Haven
Alice I. Boss, Providence
Victor Crosby, West Haven
Alice Crowe, Randolph
*Hazel Greeley, Urbana
Ellen Johnson, Calumet
Lindsay Lantz, Melrose
Eleanor Lathrop, Hartford
Mary W. Lewis, Providence
*Bryant Mason, Urbana
Mahala McGehee, Urbana
*Marguerite Nelson, Urbana
Marcia Russlow, Randolph
Randolph Smith, Melrose
Doris Stockwell, Randolph
Arthur Wickwire, West Haven
Barbara Wilder, Melrose

THE BEST WORK LAST YEAR. The plates on pages 80 and 81 show, but imperfectly for lack of color, the best results of the contest for the September work in 1911.

For Your September Work Cartoon Contest

The School Arts Magazine Offers the Following Prizes for Good School Work Done During the Month of September, 1912, for Most Amusing Drawings by Grammar Grade Pupils

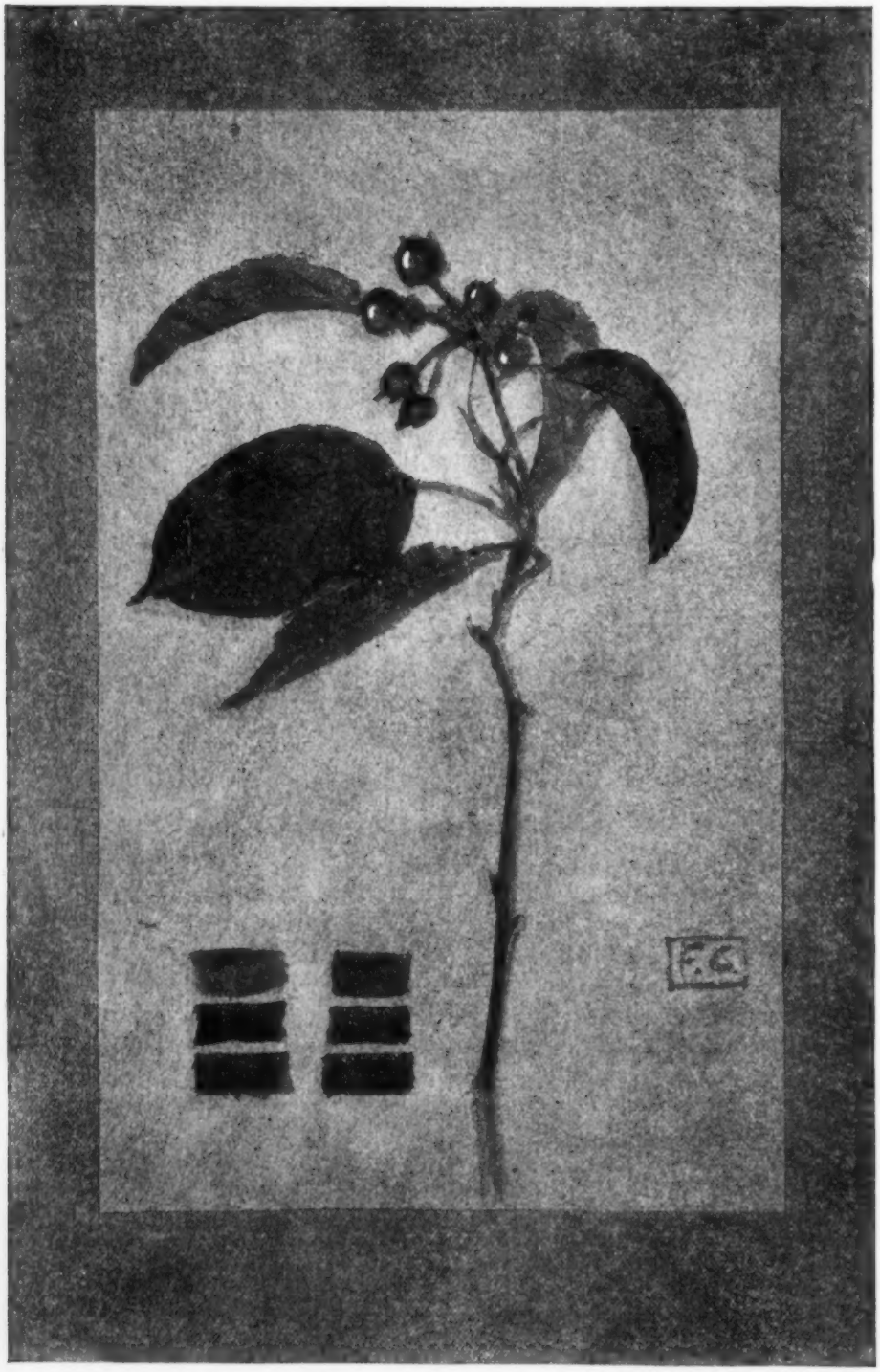
OPEN TO ALL PUPILS OF GRAMMAR SCHOOLS

ONE FIRST PRIZE: One Milton Bradley Co. Set B, German Silver Drawing Instruments, and the Badge with Silver Decoration.
FIVE SECOND PRIZES: Each, one Milton Bradley Co. High School Box of Water Colors (16 colors), and the Badge with Silver Decoration.
TEN THIRD PRIZES: Each, a Miniature Masterpiece in Frame, and the Badge of the Guild.
TWENTY OR MORE FOURTH PRIZES: Each, a Badge of the Guild.
FORTY OR MORE HONORABLE MENTION: Each, a Recognition Card.

The specimens must be the original work of children, must have the date when made, the pupil's name, age, grade, and post-office address on the back, and must be sent to Henry Turner Bailey, North Scituate, Mass. They should arrive at North Scituate on or before October 1, 1912. Send only the best work, never more than five specimens from a school. Be sure to have the required information on the back of each. Send flat and unsealed. Rate, one cent per ounce. Work receiving a reward becomes the property of THE SCHOOL ARTS PUBLISHING COMPANY. Other work will be returned upon request when accompanied with sufficient postage. The awards will be made and the prizes will be distributed in the early autumn. Awards will be announced in the November number.

HENRY TURNER BAILEY **North Scituate, Mass.**

A second prize drawing, September, 1911. By Helen Warren, VIII, Dalton, Mass. One of the most ingenious of projects: the composition original, the goldenrod drawn from nature; the scale of values prescribed by the teacher.



First prize, September, 1911. A thoughtful color study. By Fred Carlson, VII, St. Charles, Ill. The original shows conscientious study of the structure of the plant and close matching of the natural colors.